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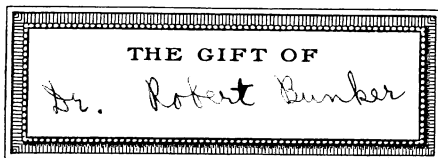
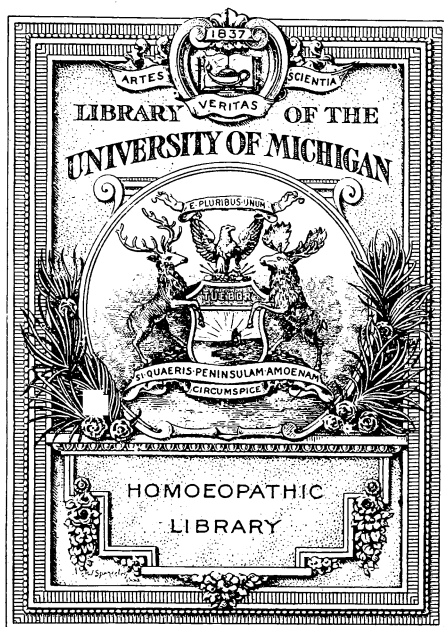
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April, 1901

HYDROPATHY ;
OR,
THE WATER-CURE.



Schwitzten. *Sweating.*



Tauchbad. *Plunging Bath.*



Dannenbad. *Half Bath.*



Kopfbad. *Head Bath.*



HYDROPATHY,

OR,

THE WATER-CURE:

ITS PRINCIPLES, MODES OF TREATMENT, &c.

Illustrated with many Cases.

COMPILED CHIEFLY FROM THE MOST EMINENT EUROPEAN AUTHORS
ON THE SUBJECT,

BY JOEL SHEW, M. D.

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SECOND EDITION, REVISED AND ENLARGED.  
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TO THE FIRST EDITION.

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the cry of danger ! danger ! instead of delusion. As to the dangers in the practice of the water-cure, what are they ? Precisely not greater than are to be found elsewhere. Not greater than to open a vein or an artery, and to draw out that fluid upon which life so much depends, or to introduce into the stomach or the circulation, the most virulent and deadly poisons in nature—things of every-day practice. The administration of pure clean water cannot certainly be attended with more danger.

That, by thousands, astounding cures have been performed in the treatment, no one can question. And so was it in tractoration. But there the mistake was as to the *how*. The objector who would class the water-cure with that delusion, has not examined the subject,—does not even know what the water-cure is. In the case of tractoration, in which the cures were performed, the subject exercised unbounded faith in the mysterious agency of the tractors. It is true, too, that Priessnitz inspires *his* patients with confidence and courage, and so must any and every practitioner of the healing art, to obtain success. But more : let the objector, professional, or non-professional, get a little way into the *secrets* of the water-cure (for to him as yet they are secrets.) If he be an invalid, let him awhile, leave, of every kind, his vile narcotics and stimulants—in every respect, his hours keep regularly. Let him “daily wash and be clean,” and be throughout regular and temperate in his meals, and in all his habits. Let him diminish, if need be, the amount of fluids in the body, by most profuse perspiration, or, by the wet sheet, reduce the temperature of the body, and the velocity of the circulation and heart’s action, to any required extent. Let him purify the blood, not by any of the thousand-and-one of the nostrums of the quack, or of the multitudinous forms of drugs innumerable, but by the cleansing effect of Nature’s own best pure fluid. Let him, if he can command courage, go to the bath, to the douche ; climb among the hills, and breathe freely the pure mountain air of heaven, and all in proportion to his increasing

strength; let him be cheerful always; and at evening, according to his inclinations, let him join in some of the social exercises—the music and the dance; and when in time he finds his body has become amazingly strengthened, and his mind active, cheerful, vigorous and blithesome, and that his old ailments inveterate are cast off, it will be a thing not easy to convince him that *all* is delusion—a work of the imagination. By this time he finds that though he *will*, as if to bring spirits from the “vasty deep,” against the effects of the water-cure, it would be willing in vain. There is at least something of physical truth in it. A greater mistake cannot be than to class this with Tractoration, Sir Kennel Digby’s sympathetic powder, or Hahneman’s decillionth grain doses of charcoal, flint, silica or cuttle-fish juice, made too potent by *ten* shakes instead of two. A wider difference cannot be.

The unprofessional manner in which the water-cure is introduced, has been a matter of objection by some. According to Dr. Rush, a medical man should be a student his life long: he should gather information from any and every source—should even lay under contribution the experience of the old woman, whom he might meet in a stage coach or elsewhere, to add to his stock of facts in the healing art. “Life is short, art is long,” said Hippocrates, “the old man of Cos.” Should an old woman, or any one, discover a drug of which it should be said, on good authority, that it was capable, in one dose, of producing the most powerful sweating, and in another, of reducing the temperature of the body most efficiently, and of retarding the velocity of the circulation to any required extent, and which consequently could be made to fulfil every intermediate indication, the student-like physician would most certainly set to work and test fairly and fully the power of the old woman’s drug. Yet who is there at all willing to do it?

The great physiologist and physician, Magendie, makes the strong assertions, that “the science of medicine is almost the

only one characterized by *uncertainty* and *chance*,"—that "the existing system of medical study confers trifling good on society,"—that "there is scarcely a sound idea on physiology abroad,"—that "the plan hitherto pursued in the study of medicine, has been too narrow ever to lead to those happy results that dignify an age by improving the condition of humanity,"—and that "the prevalent mode of treating disease, harmonizes admirably with, and is quite as senseless as, the method of reasoning in pathology. The practitioner mixes, combines, and jumbles together vegetable, mineral and animal substances; administers them right or wrong, without for a moment considering the *cause* of the disease, and without a single clear idea on the why and wherefore of his conduct." Another says, "all things considered, it were better for mankind if not a particle of medicine existed on the face of the earth;" and the learned Hoffman of the seventeenth century said, "avoid medicine and physicians, if you value your health!"

However strong and sweeping these assertions may at first appear, if we carefully examine, we shall find that there is vastly too much of truth in them. The study of the mere relation between symptoms and remedies, without sufficient reference to the removing of the *causes* of disease, has been too much the case in medicine. Hippocrates used but little medicine, and his remedies were few and simple. His principal business was to discover and remove the *causes* of disease.

Medicine has likewise been followed too much as a mere business—a means of livelihood, or a source of emolument. And then again, if we may hazard the opinion, it is too true that the existing system of medicine is often found going in direct opposition to its fundamental principles. This it is claimed cannot in truth be said of hydropathy. The practice in the water-cure is consistent, rational and explainable.

Let us not be misunderstood in this matter. Far be it from *us* to depreciate, in any way, the value of the profession. It is

error, and not men, or any class of men, that we have to contend with. The noble profession of our choice, we esteem,—a profession, than which there is none of more importance to society and the race. But we could sooner doubt our very existence, than that the healing art comes far short of doing its best work, of conferring its best good upon society. That the profession is a body of worthy and intelligent men, and that of this body are those who are ranked among the highest benefactors of the human family, society fully acknowledges. It is therefore the height of folly for any one to act *against* the profession. The water-cure, and improvements of whatever kind, wherever they may originate, must be introduced to the public generally through this profession.

As if perfection were to be found, and as if *all* medical men, unlike those of other professions, were to be perfect moral beings, we hear in glowing colors, by some, not a little said about the persecutions in medicine. We hear the grave questions, “Who denounced Harvey, the glorious discoverer of the circulation of the blood?” “Who ridiculed vaccination and persecuted its discoverer, Jenner?” And then, again, when Lady Mary Montague inoculated her child with the matter of small pox to mitigate the severity of the disorder, it is said that on the part of some there was manifested such an unwillingness to have the experiment succeed, “that she never cared to leave the child alone with them one second, lest in some secret way it should suffer from their interference.” Admit this all true—and more, and we have that which will but poorly compare with the witch manias, and the violent persecutions elsewhere. And be it remembered, too, that among the ignorant traducers of the profession, are to be found those who are ever most ready to lend their names and influence to quackery of every form, but when anything serious comes upon them, they are equally ready to avail themselves of the gratuitous services of the insulted profession.

The water-cure presupposes that all due attention be given to

the removal of the causes of disease ;—to the prevention as well as the cure. The great ignorance that exists as to the causes of disease, the means of prevention, and the best methods of curing, is an ever fruitful source of quackery of every kind. Teach people to understand the laws of life, health and disease, and then they are incapable of the imposition of the mercenary and villanous quack. And then, and not till then, will the profession attain its true dignity. And then will the labors of the true physician be rightly valued. Then will the physician's pay be more than now, like that of Boerhaave, when he practised among his best patients, as he called them—the poor.

The writer has high hopes in reference to what will yet result in this country from the introduction of the water-cure. If he is mistaken in his enthusiasm, in this new world, in the healing art, (for Captain Claridge says, Priessnitz, like Columbus, discovered a new world,) so it is : he will trust to the intelligence of his country and the profession—to time and mature experience, to convince him of his error. He is young, and can improve. When a better way is shown, he will follow it. But from what he has heard, seen, and *knows*, as yet he *must* be in his humble way an advocate of the water-cure ; and, in doing this, he has incomparably more regard for the good which it is destined to bring about in society, than for fame, reputation, or emolument.

As a matter of course, that always convenient word, “quackery,” will, by some, be applied to the water-cure treatment. But let it be remembered that it is not Priessnitz, or any one, that such are to contend with, but *the thing itself*. A method of treatment of itself in perfect accordance with the laws of nature. A *natural* remedy, only intensified by *art*. Real quackery will have but little to do with hydropathy. There is in its very nature too much of primitiveness and simplicity—not enough of mysticism—of the wonderful and marvellous. Besides, the practice is too laborious, often severely so, both for patient and practitioner. Let

the water-cure be generally understood and practised, and the very considerable firm of "Messrs. Humbug," professional and non-professional, will turn bankrupt forthwith.

If the water-cure treatment is quackery, we have quackery unique. With his vile preparations, and specifics infallible, the quack may delude the ignorant, and, villain-like, drug mankind to death,—employing in every direction, his compeers, to practise upon his thousands of patients whom he never sees or cares for, if he can but cheat them out of their substance; but to stand by the sufferer in disease, to guide the remaining energies of life, in accordance with its own laws, in such a manner as to relieve pain, "remove obstructions, relieve oppression, subdue diseased action," and strengthen and invigorate the system, thus "placing the body under the most favorable circumstances for resisting disease," remains for another besides the *quack* to perform. And this we contend can best be done, when in competent hands, by the primitive natural treatment, the water-cure. Than this to quackery, nothing can be more perfectly, more specifically antipodal.

The simplicity or oneness of the remedy will be with some a matter of objection. It should be understood that nothing is easier than by the water-cure to produce, to any given extent, directly opposite results; therefore its simplicity is greatly in its favor. Why have drugs been multiplied without number? Precisely because not one of them is to be depended upon. Not so in hydropathy. It is contended that the remedy here *can* be relied upon, and is always in competent hands, not only safe, but will always do some good—which is not true of drugs.

To the non-professional inquirer, let it be said, no remedy can be powerful for good that may not be made powerful for evil. It may appear a simple thing to "wash and be clean,"—but even this must be done rightly. Although the "sleeping in wet sheets is by no means the disagreeable thing that it is usually conceived to be," yet it must be done in the right way, or most disastrous

may be the consequences. The Russians find their snow-bath exceedingly delightful after their sweating, but they know that it can be continued but a few minutes. The Englishman finding it at once pleasant, remained too long, and thus sacrificed his life to his ignorance.

The water-cure implies temperance in detail. Those who wish to adopt the better plan, prevention rather than cure, may be assured, that in changing habits, mere *feelings* must not be taken as a guide. If they do, a blind leader of the blind it will prove. The invalid mendicant, while asking alms, declared that as long as God should let him live, he would drink every day a dram, because it gave him strength. The minister of the Gospel (not a physiologist) said he would enjoy his tea and coffee and his pipe, even if they *did* cut short his life, rather than be deprived of the good things which God gives us. But whenever the drunkard reforms, however uncomfortable at first he may *feel*, we soon find nature is true to herself. He feels like death, but yet he does not die. Soon like life from the dead he is a new and renovated man.

J. S.

P R E F A C E

TO THE SECOND EDITION.

THE compiler will here state, that since the first edition of Hydropathy, or the Water-Cure, was published, he has had numerous opportunities of testing the efficacy of the new system; and that his former confidence in it is not in the least diminished. That confidence is, if possible, growing more and more strong. The system, consisting, as it does, of an endless variety of applications of water, internal and external, warm, hot or cold, as the case may require, together with the agencies of air, exercise, diet, clothing, &c. &c., is, if the writer is not altogether mistaken, incomparably more effectual than any other, for speedily relieving pain, subduing inflammations and fevers of every kind, strengthening the body to the greatest possible extent, thus enabling it in the most effectual manner to resist disease. The new system is entirely without parallel—a significant fact, to be pondered by the “scientific” objectors, who decry Priessnitz as being an “illiterate hind of the Silesian mountains.” Let those improve upon his work who can.

The writer commenced his experiments and investigations in the new system, as indeed he did his first medical studies, with an inflexible determination to *ascertain truth*. Long before he had ever heard of the new system, and both before and after he had commenced the study of the healing art, he was at a loss to know how “setting one poison to catch another” was to be reconciled with reason;—how bleeding a person already nervous

and debilitated—a thing often done—was any more rational than the letting down of the strings of a musical instrument whose tones already failed for want of sufficient tension ;—how it was reasonable to excite the liver by mercury, causing a certain weakness and derangement of the organ already weakened and deranged—a thing of every-day occurrence in common practice, —or how it was possible for a patient in a sinking state to be kept alive, as was so often believed, by alcoholic (poisonous) stimulants. In short, the writer fortunately early learned to distrust the existing symptoms of medicine, and was on the constant look out for something better. He has not been disappointed.

If the old allopathic or common practice of medicine were at this day wholly set aside, there would immediately be a diminution of disease, suffering, and premature death ; and far better still even than now would it be if *all* drug medicines were at once wholly abandoned, and people were compelled, with pure clean water, right food, fresh air and invigorating exercise, to help themselves as they best could. There would at once be less of sickness and unnatural death. But it is said *quackery* is the cause of the mischief. Is there not quackery “ scientific,” as well as unscientific ? Do not the different sects, even in the established practice, at least *hint* that the other sects kill their patients ? “ Who shall decide when doctors disagree ? ”

In the present edition of this work it was thought best to vary to some extent the arrangement and matter from the former edition. Contrary to the ordinary mode, a collection of well ascertained facts, in the form of cases treated mostly at Graefenberg, are placed first in the volume. First let us have facts—afterwards theories. The volume, it is hoped, will not prove uninteresting.

J. S.

65 BARCLAY STREET,
February, 1845.

Hydropathy; or, the Water-Cure.

CHAPTER I.

FACTS IN WATER-CURE.

THIS chapter is made up of a collection of cases taken from the work of Edward Johnson, M.D., of London, a man well known both as a writer and practitioner in the healing art. He observes, "Most of these cases fell under my own immediate notice, and were examined by me *personally*, and their previous history and progress narrated to me by the *patients themselves*. There are two or three, however, for the history of which I am indebted to George Anthony, Esq., an English surgeon who had been residing at Priessnitz's establishment for a considerable time, and who took notes of such cases as fell under his notice. This gentleman had quitted his profession for a very lucrative appointment in the East, to which he proceeds in the latter part of this summer (1843)—that he went to Graefenberg merely as a matter of curiosity, and to fill up his time previously to his quitting Europe, and that the cases noted by him cannot, therefore, be supposed to be *colored favorably* by any interested bias towards hydropathy; against which, indeed, he evidently entertained at first a very natural and professional prejudice.

"For two other cases I am indebted to Col. Bowen, late of the Coldstream Guards; but the greatest bulk of them fell under my own immediate notice and personal examination.

“Before I proceed to the detail of cases treated at Graefenberg, I will mention two remarkable ones which I treated myself by cold water alone, more than twenty years ago—that is, before its efficacy as a remedial agent was known even to *Priessnitz himself*. I mention these merely to show how early in life I had been led, by observation and general reasoning, to form a high opinion of cold, in the treatment of disease.”

Acute Rheumatic Fever.

Somewhat more than twenty years ago I became the subject of a very uncommonly severe attack of acute rheumatic fever. I was attended by Dr. Birkbeck and Dr. Thomas Davies, who afterwards became physician to the London Hospital. I was also daily visited by some other medical gentlemen living in my neighborhood. They were exceedingly kind and attentive to me, for which I shall never cease to feel most grateful—and I am quite certain that my case was treated in the most scientific manner, that is, according to the accepted medical science of that day.

I was three times bled in the arm, and took frequently repeated doses of calchicum, which produced excessive and continued vomiting. These powerful means, however, failed to remove the pain, but reduced me to so slow a degree of exhaustion, that the fever began to assume the typhoid or nervous character. My wife was now told not to calculate upon my recovery, and ordered to give me brandy, repeatedly, and at short intervals, during the course of the night. At this time my skin was excessively hot and the bed clothes oppressive. I begged and prayed for cold water to drink,

and to have myself washed all over in cold water. Everything that was delicious and desirable in the universe seemed to be represented by these two words—cold water. My wife at last yielded to my entreaties—and the more so, inasmuch as she had often heard me enlarge upon the efficacy of cold ablution in fevers and many other diseases, and lament that popular prejudice would not suffer me to employ it so frequently as I desired. She had, moreover, herself, on one occasion, been plucked from agony and sudden danger by the use of snow.

The cold ablution, and large draughts of cold water, were immediately exhibited, and industriously and frequently repeated night and day.

In a week, with the exception of the debility consequent on the loss of so much blood, *I was quite well.*

Inflammation and Swelling of the Breasts, with general Fever.

The second case occurred in the person of my wife about a year previously to that which I have just mentioned. On the evening of the third day after her first accouchement, I came home from Guy's Hospital, where I had been detained since morning, and found her groaning and weeping with intense pain, the breasts red, and enormously enlarged, which the frightened nurse was vehemently rubbing with brandy and oil. The skin was excessively hot and dry, and the pulse was leaping along at the rate of 120. It was in the month of January—so I walked into the street with a pail, which I filled with snow, and bringing it into the sick room, I piled a heap of it over both breasts, continually adding fresh snow as it melted. In a very few minutes the milk span out in streams, to the distance of more than a

foot, and the tears of torture were at once changed for those of pleasure, accompanied by that hysterical sobbing, which is the common result of a sudden transition from intense suffering to perfect ease. The mere absence of pain in these cases takes all the characters of the most delicious and positive pleasurable sensations. In half an hour the inflammation had subsided, the breasts had become *comparatively* flaccid, the fever had entirely subsided, and not only all danger, but all inconvenience, had utterly vanished. But for this timely succor, suppuration must have supervened in both breasts, and large abscesses would have been the *inevitable consequence*.

Paralysis.

Herr Von Wulffen, an officer in the Prussian army, was seized in 1842 with a paralytic stroke. Of this he recovered. But the disease continued to recur at short intervals, until he had almost entirely lost the use of one side of the body—so that he could only walk very imperfectly and with great difficulty. In addition to this, he was extremely rheumatic, and the glands of the neck were swollen. After resorting to an infinite variety of curative means, which left him exactly where they found him, he came to Graefenberg.

After his arrival at Graefenberg and commencement of the treatment, this gentleman did not experience a single attack for two months, although before his arrival he would frequently be attacked two or three times in a month. The swelling of the glands of the neck subsided, his rheumatism was entirely removed, and his health completely re-established.

At the expiration of two months, however, he one day took an extremely long walk among the mountains, and came home very much fatigued, cold, and with wet feet. And now, instead of going to bed, he went into the hot and crowded billiard room, where he continued to play for some time. After this he suddenly lost the power of distinct utterance, could with difficulty articulate his words, and began to talk, all at once, quite incoherently. Priessnitz was sent for, who threw cold water over his face and chest, and then ordered him a foot-bath, with three men to rub his feet for half an hour. This recovered him. He was then told to walk, but after having walked for ten minutes he became so weak that he was obliged to go to bed. His friends now left him in order to go to dinner. When they returned they found him quite in his senses, but perfectly speechless, and unable to write. In fact, his tongue and right hand and foot were palsied. Priessnitz now ordered him a wet sheet (merely damp) for ten minutes—then another, a little wetter, for ten minutes more—and then a third, very wet, indeed, for ten minutes more again. Feverish symptoms now followed, with violent head-ache, and great prostration of strength. For these symptoms he was put into the tepid bath for half an hour, and well rubbed by three men the whole time. Vomiting now took place, and in the evening he was up in the saloon at supper as well and as sensible as any one there; and laughingly assuring his friends that he was now not only in full possession of his tongue, but of his teeth too. Since this time, which is now some months ago, he has had no return, has the perfect use of all his limbs, and is otherwise in good health.

Herr Regenhard, of Vienna, had suffered for many years

from nervous disease and severe dyspepsia. Three years since he had a paralytic seizure of the right half of the body—not severe—and from which he recovered. Six months afterwards he had a second attack—more severe—from which, however, he partially recovered. Four months later he had a third attack, and afterwards a fourth and fifth, the intervals between the fits becoming shorter and shorter, until they returned every fortnight. His right leg and arm now became nearly useless. He was advised to try the baths at Toeplitz, which he did, but without any good result. He returned to Vienna ; he took the best advice which that capital could afford, but entirely without benefit. One of his physicians at last, with a candor and honesty which done him honor, confessed that he believed his case to be beyond the reach of any ordinary medical treatment, and recommended him to try the water-cure. He came to Graefenberg in company with my friend Mr. Niemann, who was also going to Graefenberg on his own account. He arrived there in May, and was then in his sixtieth year. He was immediately put under a very mild treatment (merely an *abreibung*, rubbing the head with a wet cloth, and a *coph-bath*). In six weeks he had crises, but (which is very remarkable) only on the side affected. Not a single pimple appeared on the sound side. When the crises appeared he took *leintuchs* with *abgeschrecktes* bath. No cold-bath, no *douche*, no *sitz-bath*. He continued to have crises till October (five months). He then left perfectly recovered, never having had a single attack after he commenced the treatment. His friends at Graefenberg have since received two letters from him, perfectly well written by that same right hand which was paralyzed and useless

when he first came to Graefenberg, and which had been to him nearly a profitless member for the three previous years.

In gratitude for his recovery, he has made several ornamental presents to the grounds about Graefenberg, which still remain, and will remain there, monuments of the curative power of cold water. Indeed, Graefenberg abounds with such monuments, both in iron and stone, erected by Gratitude in commemoration of recovered health, and of a size and durability which gives them a fair chance of endurance for hundreds of years.

Captain Wardle, of the Fiquelmont dragoons, the nephew of Colonel Wardle, celebrated for certain charges which he preferred against the Duke of York, became suddenly deprived of the use of one entire side. He was blind of one eye, deaf of one ear, and the leg and arm of one side were paralyzed. He was twenty-two years of age. Under the water-cure he entirely recovered. The sight of the eye was perfectly restored, his hearing entirely regained, and the full use of his limbs returned. After his recovery, Colonel Bowen saw him on guard at the theatre of Prague the picture of youthful health and manly strength. He is still on military duty at Prague.

Sciatica.

Mr. Wangler, merchant, had been affected with sciatica for eighteen months. He was living at Milan, and the physicians there recommended him to have the actual cautery* applied to the part. This, however, he refused. He

* The actual cautery is a hot iron.

then went to a water establishment in the Tyrol, superintended by a physician, but one who was grossly ignorant of the principles on which the water-cure proceeds. This gentleman succeeded at last in persuading him to submit to the actual cautery, for his sufferings were so great that he would have submitted to almost any thing in the hope of relief. He showed me the deep scar left by the hot iron, and which was as large as my extended hand. From the actual cautery, however, he received no benefit, and, in consequence of injudicious treatment, he became exceedingly ill, and then proceeded to Vienna, where he placed himself under the most celebrated medical practitioners, and underwent every conceivable mode of treatment. While submitting to treatment at Vienna, his bowels suddenly became constipated, and would never relieve themselves without the aid of medicine ; and his thigh dwindled away until it was but little larger than his wrist ; and he could not walk a single step.

He was now brought to Graefenberg, where he has resided for the last nine months. He gave me the history of his case himself, and was good enough to let me examine the affected parts. He is now perfectly well, entirely free from pain, full of flesh and animal spirits, and the withered thigh has entirely recovered its original very fleshy dimensions. He is not in the slightest degree lame, and can climb the mountains with the best of them, and in any weather. He is covered with the usual critical eruption, as soon as which subsides he will return to his family at Milan. He is forty-eight years of age. His treatment consisted of the lein-tuch, succeeded by the tepid bath, the sitz bath, and douche.

Sciatica with Lumbago.

Monsieur Varnod was afflicted with sciatica for *three years* so severely that it was with great difficulty he could walk even with the aid of a stick. Every ordinary means of cure had been resorted to without effect. He was at last prevailed upon to visit a water establishment at Innspruck. With great pain and difficulty he was got down to the side of the cold bath; and here it required a great exertion of courage in a lame man, and one who could not on any sudden emergency move his limbs without excruciating pain—I quite agree with him, that it required great courage in one so situated to allow himself to be tumbled heels over head into the water. With fear and trembling, however, he submitted, and to his utter astonishment found that while in the water he could move his limb without the slightest pain or inconvenience. The pain had entirely vanished, and from that moment to this it has never returned, nor does he exhibit the slightest indication of lameness or weakness in either of his legs. He is now at Graefenberg for another disease—a disease of the skin.

Constipation.

Herr Fricks, the father of the young man whose case I am about to relate, put himself under treatment also, for an obstinate constipation which had annoyed him, and interfered greatly with his health, for 17 years. So obstinate and torpid had the bowels become, that it would frequently require four or five lavements before their contents could be emptied.

This gentleman was treated by lein-tuchs and sitz baths

—four of the former daily, (two in the morning, and two in the evening, each couple of lein-tuchs being succeeded by the tepid bath,) and two of the latter also daily.

In a fortnight this gentleman's bowels began to empty themselves, without any assistance, daily and plenteously, and have continued to do so up to the time when I left Graefenberg.

Mr. Niemann, a gentleman about 35 years of age, was affected by obstinate constipation. During five entire years he never once was able to pass a motion, without the aid of either medicine or an injection. He is now at Graefenberg, and for the last four months has had a regular and healthy evacuation every day, without the use either of injection, or of a single grain of medicine of any kind whatever. Had not this gentleman's constipated condition of bowels been thus fortunately removed, I feel quite sure that every unprejudiced medical man will allow that, sooner or later, severe disease, in some shape or other, must have been perfectly inevitable.

This gentleman had no crisis.

Dyspepsia.

Mr. —, 48 years of age, had been accustomed for many years to indulge in a very free mode of living. His daily regular allowance of wine was one full bottle, in addition to sundry glasses of ale, and a couple of glasses of brandy and water in the evening. This was his regular daily quantity. Under this excitement his health soon began to suffer, and it grew gradually worse, until, about twelve months since, he was in so shattered a condition, that he found it necessary to adopt some rigorous and continued

means to repair the mischief his constitution had sustained. The symptoms of which he complained were, excessive languor, physical weakness, drowsiness, and depression of spirits, foul tongue, relaxed throat, (to such an extent that he was obliged to have his uvula removed by the surgeon's knife,) capricious appetite, and all that long train of the most distressing symptoms which characterize a severe case of dyspepsia, accompanied by hypochondriasis. He had been affected, too, for many years, with large furunculi, or boils, of such severe and irritable character, that when one appeared on the chin, it would cause the whole of one side of the face to swell so violently as to entirely close the eye of that side. For these furunculi he consulted a London physician, who ordered him to take a pill every day before dinner, consisting of aloes, rhubarb, and an extract of camomile. These pills stopped the appearance of the furunculi, and from that moment all his distressing symptoms became aggravated.

After very many fruitless efforts to regain his health, he repaired to Graefenberg. At this time he was so weak that he could not walk the length of a single street. At Dresden, which is a small city, in attempting to walk from one exhibition to another, he found himself unable to do so, and obliged to dispatch his servant for a coach while he waited for its arrival. His breath, moreover, was so short that he could not maintain a conversation for more than five minutes together. In six weeks after his arrival at Graefenberg he could sing; and his strength is now so great, that he walks up and down the snow-clad mountains, often as early as six o'clock in the morning, without any difficulty, in all kinds of weather, and he declared to me that he be-

lieved himself able to run continuously, at a moderate pace, for a distance of three or four miles without stopping. Every day I see him climbing the hill-side in large jack-boots, breasting the acclivity with the firm and vigorous step of perfect health and strength. This gentleman bathes, and douches, and takes one or two wet-sheets every day, wears umschlags round the body, and drinks nothing but pure cold water. Yet this gentleman had been all his life accustomed to luxurious living, and the daily use of wine and spirits. He declares that when he came to Graefenberg he did not know even the taste of water—for when he cleaned his teeth in the morning, he always took great care to expel every drop of water with the tip of his tongue, fancying that if he suffered it to enter the cavity of his mouth, it could not fail of producing some deadly mischief; and he would as soon have thought of swallowing poison, as of drinking a cup of cold water. And this gentleman did not leave off the use of stimulants gradually—he left them off entirely at once—and so far from experiencing any evil consequences, he immediately became sensible of relief.

I will just mention that this gentleman had for a great many years (perhaps 20) a large fatty tumor on his back—so large as to be quite visible through all his clothes, and giving to him an appearance of deformity. When I examined this tumor a few days ago it had almost entirely disappeared.

Dyspepsia and Rheumatism.

Herr Baumann, a builder, from Saxe Wiemar, 45 years of age, suffering under rheumatism, dyspepsia, nervous debility, and with a constitution, to all appearance, quite

broken. The first crisis made its appearance, in the form of the usual eruption, and he felt himself relieved. Some time after this, however, he had another crisis, consisting of what are called furunculi, or boils. He now began to mend rapidly. His dyspeptic symptoms left him, his rheumatic pains ceased, his nervous debility gradually vanished, and his health is now firm, strong and good.

Mr. J. B. S——, a gentleman of Manchester, came to Graefenberg in June last. I had the history of the case from his own mouth. His case was one of confirmed and obstinate dyspepsia of four years' standing. Being a man of property he took the advice of the most eminent physician, who, having failed in relieving him, finally recommended him to travel in a warmer climate. In obedience to his advice he went to Rome. Here he improved a little for a short time, and then became again as ill as he was when he sat out.

While travelling on the continent he accidentally made the acquaintance of a Captain Fuminelli, of Venice, to whom he related his case, and the object of his travel—a search after health. The captain, now the strongest man in Venice, and who had himself been raised from a sickly condition to one of high health, by the sole use of cold water, at once strongly recommended him to repair to Graefenberg, and he came accordingly. When he arrived his symptoms were these—first, great general physical debility. so that he could not walk even a small distance without great fatigue and exhaustion. He was the subject of constant heartburn—his tongue exceedingly foul—his appetite capricious—and his stools invariably presented the appearance of little, hard, stony balls. He was perpetually annoyed

by *sighing and gaping*, which he could not resist even when engaged in conversation—proofs of great vital debility. In addition to all this he had a constant and severe pain in his left side.

This was his condition for four years. These were the symptoms which had obstinately resisted the most judicious medical treatment under the ablest medical advice in England. The first sensible effects of the treatment were manifested in the changed appearance of the alvine evacuations. These became large, hard, dry and solid, and their expulsion exceedingly painful. For this he was ordered a wet bandage round the body, covering the whole abdomen and stomach. In two days his motions assumed a perfectly natural and healthy appearance. He now made rapid progress. His tongue became cleaner, the pain in the side greatly relieved, the heartburn left him, his appetite became steady and good, his strength greatly increased, and he felt so well that he made up his mind to discontinue the treatment and go home. He was not, however, yet quite well, for as soon as he left off the treatment his health flagged. and he describes his feelings as resembling those of one who suddenly loses some long-continued cause of excitement. He felt low, depressed, and was obliged to resume the treatment. After having undergone the treatment for some weeks longer, however, he entirely recovered both his health and strength, and could spend a whole day in climbing the mountains without suffering more fatigue than would necessarily be felt by a strong and healthy man. He has now been in perfect health for four months, during the whole of which time he has entirely discontinued the treatment, with the exception of an ordinary cold bath every

morning. He only remains at Graefenberg on his wife's account, who has also been undergoing the treatment, and whose case he has likewise kindly permitted me to publish.

Mr. J. B. S——'s crisis occurred about the eighth week after he commenced the treatment, in the form of a thick rash, which entirely covered his legs, thighs, and arms. Immediately after the appearance of this eruption, the pain in the side began to decrease, and with it the eruption also disappeared. He declares to me that he cannot remember the time when he felt himself in such good health and strength as he is at this moment.

Gout and Rheumatism, complicated with Venereal taint.

For thirteen years Captain Vogt had been the subject of severe pains in his wrists, ancles, knees, and the long bones of his legs and thighs. While suffering thus, he contracted the venereal disease, of which he was not properly cured. From this time his rheumatic pains were aggravated tenfold ; so much so that he was at intervals confined to his bed for several weeks at a time.

In this forlorn condition he arrived at Graefenberg, and was immediately put under treatment. The first crisis which manifested itself was a return of the chancre, which he had contracted six years before. This, however, got perfectly well in a fortnight. He has been here eight months, and when I examined him a few weeks since he was completely recovered, free from all pain, active with his limbs, and able to take any reasonable amount of exercise on foot or on horseback. He is covered with a critical eruption all over his limbs and body, and he only waits for the subsidence of this to return home. He was on full

treatment the whole time, with the exception of the sweating blanket. He wore umschlags night and day, which, during the day, were renewed five times.

Gout in the Hands and Knees.

Mr. —, 45 years of age, had gout in his hands and feet for twelve years. He began the treatment in July, 1842. At six in the morning, lein-tuch for half an hour—tepid bath for five minutes. At eleven and at five the same treatment repeated. He wore umschlags. On the second day he sweated for two hours—took a tepid bath for two minutes—after which a cold bath for one minute—then another tepid for two minutes. At eleven o'clock he took a foot-bath for twenty minutes. At five o'clock he took a lein-tuch, for half an hour, with tepid, &c. &c., as in the morning. This treatment was pursued for ten days. After the tenth day, immediately after the sweating, a cold bath for a minute. In the third week he douched in addition to the other treatment, and wore wet bandages on the knees. He got well rapidly.

Rheumatism with Psoriasis.

Mr. G——, an officer in the army, aged 59 years, about twenty years since began to be affected in the muscular part of the legs and thighs with very severe pains. At last they became so exceedingly sensible of cold and damp that, in frosty weather, while sitting within doors, he was always compelled to have the lower half of his body enveloped in a cloak, and no barometer could indicate a coming change in the weather with greater exactitude than this gentleman's legs. This state of things lasted, with little varia-

tion, for twenty years, not confining him to the house, but embittering his life, interfering with his prospects, and poisoning all the springs of enjoyment. During these twenty years he was three times sent home under a medical board as unfit for duty—once from the West Indies, once from the Mauritius, and once from New South Wales. His legs, I forgot to mention, had also become, very early in the disorder, covered with that obstinate itching disease, called psoriasis; and for several years any attempt to lean forward in the act of writing gave him acute pain in the region of the stomach. After having taken the advice of a multitude of physicians to no purpose, he was recommended to travel. He visited Wild Bad, in the Black Forest, Wild Bad Gastein, on the Norrishe Alys, Buxton, Bath, Ramsgate, and spent one whole winter in Italy; but all in vain. At last he heard of the water-cure and determined to visit Graefenberg, where he still remains, the very merriest man of the whole two hundred, who are now, in the very depth of winter, and with the snow a foot thick, daily undergoing the water treatment at that place.

He has had crises, both in the form of rash and of furunculi. He has also had diarrhœa, which confined him to his bed for three days. During these three days he wore umschlags night and day changed every hour—with sitz-baths. When the feet became very cold he had them rubbed with cloths dipped in cold water, and wrung out. In the evening he became feverish, for which he was put into a shallow bath for five minutes. This immediately removed the fever. When he was first attacked with diarrhœa his appetite went, and he could only take a little rusk in cold water. It soon, however, returned and became better than

ever. He is now in excellent health, his pains and the eruption rapidly leaving him, and he is looking forward with the utmost confidence to a perfect cure.

*Case of Psoriasis. Communicated by George Anthony, Esq.,
an English Surgeon, now at Graefenberg.*

Mr. Burch, a farmer from Somersetshire, aged 50 years, a stout, strong man, came to Graefenberg in the middle of October last (1842.) He was examined, and the progress of his case watched, with great interest by Mr. Anthony, and many others, resident at Graefenberg.

His whole body and limbs were literally covered with that most obstinate, and, generally speaking, hitherto incurable disease, called psoriasis. Deep fissures had formed in many parts, and an enormous quantity of scurf and scales were swept out of his bed every morning, while the itching with which he was annoyed was almost intolerable. It was that form of psoriasis which is sometimes called, though I think erroneously, *lepra figurata*. He had been afflicted with this abominable scourge for *many years* ; and had consulted many physicians of acknowledged eminence without the slightest benefit. Every mode of treatment which he had adopted had utterly failed of making the slightest impression on the disease.

When he consulted Priessnitz he was told that he would certainly get well. but that it was by far the worst case he had ever seen, although he had seen great numbers, and that it might take two or three years to effect a perfect cure. On hearing this he became disheartened, since circumstances would not allow him to sacrifice so much time. He was determined, however, not to return without making

a trial. He went down the hill on which Graefenberg stands, into the town of Friewaldau, in which many of Priessnitz's patients, who cannot find room in Graefenberg, take lodgings. He here commenced the treatment, drinking large quantities of cold water, and confining his diet to bread alone. He continued this plan for about six weeks, when, to his joyful astonishment, as well as that of Priessnitz himself, the eruption almost entirely disappeared. In this case, the crisis showed itself in the shape of diarrhœa.

In order to produce perspiration he slept under a German feather bed, close to a German stove, which gave him a profuse perspiration every night—an effect which his medical man had often labored to produce in vain, and which he had never experienced for many years.

Having now remained as long as circumstances would possibly permit, he left Friewaldau to all appearance perfectly well, with the exception of a few isolated spots. On his way home he was accompanied as far as Prague by Mr. Ellis, a gentleman who is still at Graefenberg undergoing the water-cure. Here he all at once returned to a very free diet. From a very scanty diet, and one consisting solely of bread, milk, and water, he leaped at once to the full diet of the fashionable continental hotels, with wine, &c. The consequence of this was a fit of the gout and a relapse. But from the very marked and powerful impression which was made by the treatment upon the disease in the short space of six weeks, no rational doubt can exist, and no doubt was entertained by any of the gentlemen who saw the progress of the case, some of whom were medical men, that the disease would have been entirely removed could the patient have submitted a little longer to the treat-

ment, and confined himself for a longer period to a more rigorous diet. It should be remembered that this gentleman was 50 years of age—that his disease had existed not merely for many months, but for many years—and that the various modes of treatment which he had adopted under the ablest advice had not only been unable to cure it, but even to make the slightest impression upon it.

Skin Disease—Psoriasis.

Mr. Spangenberg, a gentleman of Hamburg, a young man of very high attainments, and the son of the late very eminent Dr. Spangenberg, (about 24 years of age,) had been afflicted with a scaly eruption over his face, and entire body and limbs, for twelve years. The disease first made its appearance in the form of red, itching patches. These became covered with small scurfy laminæ, or scales, which were easily rubbed off, leaving the patches red and shining as before. In a very short time, however, the scales were reproduced, and fell off as before. The itching was excessive, and this distressing condition continued for twelve years, in spite of the most varied and persevering efforts, under the most able medical advice, to remove it.

In this pitiable state he came to Graefenberg, covered from head to foot, face and all, with a disease at once loathsome, and, in an uncommon degree, distressing. His complexion was exceedingly fair, his eyes blue, and his hair flaxen—his temperament irritable. And it required a good deal of tact to accommodate the intensity of the treatment to the excessive sensibility of his skin, which made it frequently necessary to change it ; for whenever it was urged too far, the disease was aggravated. By constantly varying

the treatment, however, his skin became gradually accustomed to the impressions of the various baths, and when I arrived at Graefenberg, his treatment consisted of two lein-tuchs every morning, one immediately after the other, (the former for half an hour, the latter for three-quarters,) immediately succeeded by the cold bath. At twelve o'clock he took a wet sheet, and sitz-bath. At five he took another lein-tuch for an hour and a half, succeeded by another cold bath. All night he wore wet linen pantaloons, from his ancles up to his arm-pits. He also wore wet bandages round his arms. All day he wore wet bandages round the entire body and arms, which were renewed five times *daily*. In the summer months he took the blanket and douched; but these it was found necessary to discontinue.

This gentleman's crisis assumed the form of diarrhœa, immediately after the occurrence of which, his disease began to disappear. I saw him almost every day, and examined him repeatedly. When I left Graefenberg, he was so nearly well that a few isolated dark-colored spots, indicating the parts where the disease had been most virulent, were all that were left.

Skin Disease following Gonorrhœa.

The following case I detail for an especial purpose—for the purpose of showing in what manner the most obstinate diseases, especially of the skin, and painful rheumatic affections (so called), are constantly produced.

Herr Von Nehemet, a Hungarian gentleman, three years ago contracted gonorrhœa. After having vainly endeavored to rid himself of his malady for nine months, it *suddenly disappeared* on taking a large dose of *cubeb*s.

Soon after this sudden disappearance, an *eruption* showed itself on his face and nose, for which he took Pul-nau water, which seemed to remove it. He was now, to *all appearance*, well ; but the suddenness with which both the original disorder and the eruption had ceased, made him distrust the soundness and permanence of the apparent cure. Distressed with this feeling of insecurity, and his family being at Graefenberg, he determined to go thither too, and submit himself to the Graefenberg treatment. He was soon satisfied that his fears were but too well-founded. For, shortly after he began to adopt the remedy, a crop of small ulcers made their appearance round the fundament. Similar ones soon showed themselves on his legs, and presently his hands and fingers became covered with pustules.

By slow degrees, however, the whole of these symptoms vanished, and his health was perfectly restored. He left Graefenberg while I was still there.

Now, I think it cannot be doubted that when this gentleman's original disease so suddenly disappeared, his system *still retained the poison* with which he had been first inoculated. Nor can it be doubted, that if that poison had not been thrown to the surface by the treatment adopted, he must have become, at some future time, the subject of severe disease, of some kind or other.

I am persuaded that multitudes of anomalous disorders, whose causes seemed buried in obscurity, are occasioned by *suppressed poison*—and often by a poison of the kind here alluded to.

Fistula in Ano.

The young Count Thun, a youth sixteen years of age,

became sensible of uneasiness in the neighborhood of the rectum while passing his motions. This uneasiness gradually increased until it became so severe as to prevent him from riding on horseback. The parts were now examined by a surgeon, and found to be thickened, enlarged, and hardened. In a short time the pain became excessively severe, and other advice was taken, both at Vienna and Prague. It was determined to puncture the part. This was done, and a discharge of matter mixed with blood ensued. The disease was now pronounced to be fistula. Attempts were made to effect a cure, by means of injections thrown into the sinuses through the puncture; and that the case was one of perfect or complete fistula is proved by the fact that a portion of the injected matter always escaped through the sphincter, proving beyond question that the sinus opened into the bowel. A great variety of injections having been used with no benefit whatever, the case was pronounced to be incurable without an operation. To this measure the young Count could not be persuaded to submit. He had now been under medical and surgical treatment for twelve months. He had five fistulous openings around the anus, and his system had been so much reduced that it was with the utmost difficulty he could walk, even when assisted by the arm of his father.

When I saw him he had been at Graefenberg eight months. For the first three months he took daily three wet sheets of an hour each—each being immediately followed by the cold bath. He wore umschlags round the body, and under the crotch night and day. At the expiration of three months he began to douche every day; and he has only now just begun to undergo the sweating pro-

cess. He takes all his food, both meat and drink, perfectly cold. He has never taken a sitz-bath ; nor has he had any crisis.

After hearing the detail of the case from the father, whose memory was assisted by the son himself, I requested that I might be allowed to examine the parts. This request was immediately complied with. The scars left by the healing of the sinuses were distinctly visible. But the thickening has disappeared, as well as the pain, which I ascertained by making firm pressure entirely round the anus, and especially upon the scarred parts. Four out of the five openings were perfectly and soundly healed, but there yet remained one, formerly as large as the tip of the little finger, but now not larger than a pin's head, to be healed.

Prepared as I already was by à priori reasoning from the nature of animal life up to the nature of animal disease, and from the nature of disease up to the true nature of remedies, to award great efficacy to the cold water-cure, yet I must confess that if I had not witnessed this case, and also the one which follows, with my own eyes, I should have had great difficulty in believing the truth of the statement.

Urinary Fistula.

Baron Lauengen, of Lauengen, captain of cavalry, struck himself a severe blow against the pommel of his saddle. Inflammation and much tumefaction ensued. After a time the swelling of the part was enormous, and fluctuation was distinctly felt. An opening was made into it, very low down, from which there immediately escaped

a very large quantity of urine. This puncture never healed, but the urine continued constantly to flow through it. He suffered from this state of things for two years, which two years were spent in fruitless endeavors, under the advice of the very best continental surgeons, to heal this fistulous sore. He then came to Graefenberg, where he has been, if I remember right, only eight months. He was kind enough to suffer me to examine the part, which I found to be perfectly healed and sound, the scar where the opening had been still remaining distinctly visible near the raphe.

Gonorrhœa.

A gentleman of Transylvania, a healthy man, twenty-eight years of age, contracted gonorrhœa. In spite of all the means which could be devised by his medical advisers, the disease continued for fifteen months. Four months after he had got well he contracted the disease a second time. The treatment he had gone through on the former occasion had been so painful as well as unsuccessful, that he could not make up his mind to submit to it again, but resolved to go to Graefenberg. He was three weeks on the journey, and he had had the disease three weeks before he started. The disorder was of a virulent kind. The treatment which was adopted in this case was as follows: At half past six in the morning he took a wet sheet. After the wet sheet he took a tepid shallow bath, at twelve degrees of Reaumur. After this (immediately) the cold bath, and directly after this the shallow bath again. At ten o'clock he took a tepid sitz-bath, at twelve degrees, for half an hour. At five o'clock the wet sheet and all the treatment of the morning over again. He drank thirteen glasses of cold

water daily, and wore umschlags round the abdomen day and night. This treatment continued for a week, but on the fourth day the disease had entirely disappeared. It was thought desirable, however, to continue the treatment a little longer. In the second week he took the two wet sheets as at the beginning, but went immediately after each into the cold bath, without the intervention of the tepid shallow bath. At ten o'clock in the morning he douched for five minutes, but not on the seat of the disease, nor on the stomach, nor on the head. At twelve o'clock he took a sitz-bath *cold* for five quarters of an hour. At the end of the second week he left perfectly cured.

Consumption.

Extracts (translated from the Italian) from a letter received by J. B. S——, Esq., at Graefenberg, from Captain A. F——, of the Marine Artillery, Venice.

Venice, 10th Feb., 1843.

* * * * Mr. and Mrs. H. are much obliged by your kindness, and have heard with great pleasure the good effects of the cure, on which they sincerely congratulate you, and return their kind compliments to you and your lady. The reading of your letter has determined H—— to visit Graefenberg next summer. He will profit by your advice, with respect to the method which you recommend him to adopt while there. Colonel S—— is very well; he says that he feels himself ten years younger, (since his visit to Graefenberg, 1842,) and sends his compliments to you both.

With regard to my own case, it is given in few words. From my twenty-fifth to my thirty-first year, I was subject

to frequent affections of the chest, for which my physicians ordered me to lose blood, and gave me palliatives, which treatment left me constantly liable to relapses. They said I was of a plethoric habit, and that I must have the mass of my blood diminished. These diseases were produced by weakness brought on by a too sedentary life, too much application to study, and too free indulgence in wine and spirit. My constitution was extremely delicate, and the least draught of air caused inflammation of the lungs.

These affections of the chest returned three or four times a year, until the last time, 1827, the lungs were so much weakened that I could scarcely breathe. At this same period (I was then thirty-one years of age) I was at Zarra, in Dalmatia, and had a severe attack, which lasted several months, and of which I could not recover. I was confined entirely to my room. The physician said that it would be death to me if I exposed myself to the open air. I had a consultation of physicians, at which Dr. Pinelli, the principal physician in Dalmatia, attended, and I was declared consumptive. I was studying at that time the German language, and whilst reading the "*Conversations Lexicon*," I was struck with the article "Huffeland." In this article great praise was given to his (Huffeland's) work on Macrobiotics, (or the art of prolonging life.) I obtained this work; and it seemed to me that I recognized my own case in it. As I was already quite given up by the faculty, I thought that in my position as an officer it would be best for me to attempt an *heroic* cure, and to put an end to my disorders, either by death or recovery. I bade adieu to all my physicians, in a *half-dying state*, and began to wash myself in my room with fresh water, by means of a sponge—repeat.

ing this operation several times a day—and limiting my diet to vegetables, fruit, and water.

I began to feel benefit in a few days, and soon acquired courage to go out. In the course of the forty days I was strong enough to begin sea-bathing. It was the month of August, 1827.

The sea-bathing, which I took every morning, *in all weathers*, joined with exercise immediately after the bath, continually strengthened me more and more, and in the space of five months I found myself the strongest and the healthiest of any of my companions. From that time to the present day I have had no illness of any kind. I drink no wine, because I do not like it. But I *could* drink it without any evil result.

I prefer vegetable diet ; but, for several years that I was at sea, I took animal food, without the least inconvenience. I expose myself to all weathers—and go without a cloak, even in winter, in order to put my health to the proof. I go from a hot atmosphere into a cold one, *et vice versa*, without any precaution. I wear no flannel, and lead a very irregular life.

In 1835, when I was on board ship, I was attacked, in the Port of the Piræus, with an epidemic fever, which raged there on account of the marshes ; and which attacked three-fourths of the crew. On the *second* and *third* attack of fever, I took, each time, a bath in the sea, and recovered, while my companions were ill for *several months*.

The only precaution which I observe is to bathe every day in the sea, in all weathers, and in all seasons, when I have the opportunity ; and to take a *douche bath** for one

* Three buckets of water poured over him.

minute, and wash myself all over with cold water, as soon as I get out of bed. I drink a great deal of cold water—from twenty to twenty-five beakers every day—chiefly in the morning before breakfast. But whenever I have been so situated that I could do *none of these things*, I have still felt myself perfectly well.

In short, at the age of forty-seven, I feel myself stronger than I was at twenty-five, before I was attacked by disease in my chest. This is the method which I followed before I had any knowledge of the method of Priessnitz, with which I only became acquainted five years ago when I returned from the Levant; and which has determined me to continue it, and to recommend it to all my friends.

If Dr. Johnson wishes to make use of this information I have no objection whatever. I only request him to put merely the *initials* of my name.

I request you to write to me before you leave Graefenberg, and to believe that I am, and shall always be, with the most perfect esteem, &c. &c. A. F.

Captain of the Marine Artillery.

Cough, Weakness of the Chest, and Injury of the Back.

Mrs. J. B. S——'s case, related in her own words.

From a child I never recollect to have had strong health. I was constantly suffering from the illness incident to children, besides much cough, with tendency to weakness of the chest, for which at an early period I was ordered to wear a flannel dress next the skin. When at school and whilst playing, I fell backwards over a garden roller, to which I paid no attention, although finding it difficult either to walk fast or to run for a few days. From this circumstance

I think may be dated the weakness in my back, which was first evinced in a difficulty to rise from the ground, if I had been stooping or kneeling whilst at work in my garden; the feeling being a total prostration of strength from the lower region of my back, (precisely the part hurt) to the knees. Still I struggled against the weakness until I found myself incapable of walking up a slight hill with ease. Application was then made to the physician, by whom I was ordered to rub the part well with a liniment principally composed of essential oils, and which produced a discharge equal to that of a perpetual blister, and for a time restored strength to my back; but the disease invariably returned.

This state of debility continued until 1841, when I think it increased; if I walked up a long staircase, my strength was exhausted; the same indeed after any slight exertion. In 1842 I came to Graefenberg. I was ordered to *leave off flannel*, a lein-tuch for one hour, to be succeeded by the abgeschrecktes bath, in which I was well rubbed for a few minutes; an abreibung and sitz-bath at eleven o'clock, and the same at four o'clock in the afternoon. In a fortnight I was ordered to plunge *once* in the cold bath, returning thence to the abgeschrecktes to assist the circulation of the blood. At the expiration of five weeks from my first arrival at Graefenberg, I was suddenly seized with an utter prostration of strength, so much so that my legs dragged, and I feared paralysis. This was succeeded by ague, shiverings, and burnings, pains from head to foot, but principally across the loins. A profuse natural perspiration relieved me of much uneasiness, and, when Herr Priessnitz came, he ordered an immediate abreibung with umschlags around the waist, to be repeated frequently so long as the pain con-

tinued violent in the loins. If I were better in the morning the bathing was to be continued as usual. This was done. When I attempted to walk after being dressed, I found myself incapable of the exertion, being weak almost as an infant. During two days I ate only a little bread and drank water, the food that my appetite asked for. In four days my strength had considerably returned, and in a week I was well as usual. After this fever I was ordered to douche, which in a very short period produced considerable swelling in my left foot; then I was ordered a foot-bath, Priessnitz saying, "it was probable a crisis was approaching;" which took place in a few days, and which discharged as an issue for seven weeks. Another succeeded, which lasted for five, and another afterwards for three weeks, more violent than the preceding, with a multitude of little ones; and after each one I felt stronger and stronger, and now have to rejoice that all pain in the back, with that prostration of strength, and every other symptom of debility, head-ache, &c. &c., have apparently bid me farewell.

Deafness.

While I was staying at Graefenberg, during the first week in January of the present year (1843), Herr Fricks, a young Prussian, aged twenty-seven years, arrived from Stettin.

He had been totally deaf for ten years, his deafness having been produced by a severe attack of typhus fever. During the course, however, of the whole ten years his hearing returned three times, but only remained *a day or two*, when he became again as deaf as ever. Having undergone treatment *for twelve days*, a large quantity of matter issued from

his nose. He immediately regained his perfect hearing, and remained quite well up to the time when I left *Graefenberg*—a period of about six weeks.

I will here relate an accident which befel this young man, in order to show that the water treatment is an edged tool which cannot with impunity be trifled with—and that, like every other remedy which is not mere chip in porridge, it is only safe in the hands of those who know how to adapt its use to the peculiarities and powers of individual constitutions.

He had been packed in the blanket ; but, after having lain there for three hours, did not perspire. He was ordered therefore to be taken out and put into the tepid bath. The bath-servant, however, either to save trouble, or from misunderstanding, put him in the *cold* bath. The moment he came out he fell down, and remained perfectly senseless for more than an hour. Constant friction, however, with the wet hands, at length restored him.

General Baron Esch, commanding the cavalry at Prague, a gentleman well known in the military world, and who made his first campaign with the Duke of York, at Dunkirk, in 1799, was afflicted with a confirmed deafness of several years' standing, for which the most celebrated physicians in Austria had all been repeatedly consulted without relief. At last he was induced to go to *Graefenberg*, and consult Priessnitz, who told him he thought he could cure him, but would not say what length of time it might require. He was immediately put under treatment, and at the expiration of six weeks he had perfectly recovered his hearing. This case was related to me by Colonel

Bowen, late of the Coldstream Guards, who is now undergoing the treatment for chronic inflammation of the eyes, and who was a personal friend of General Esch, and had the statement from his own lips. The General also related to Colonel Bowen, the case of a young dragoon officer under his command.

Hip Disease.

One of the first cases which attracted my attention, after my arrival at Graefenberg, was a case of hip disease, in Elizabeth St——, a child eight years of age, and the daughter of highly respectable parents at Hamburg. On inquiry of the child's governess, she stated that the hips had become enlarged rather more than two years ago—that the tumefaction gradually increased—that the child constantly complained of pain in the knee—that the leg and thigh became gradually wasted—that the knee joint became firmly contracted, and bent nearly at right angles, so that she could only walk with two crutches, the other limb being weak, and the general habit of the child *delicate*, and, in fact, *scrofulous*. Every medical man, if any such be present, will immediately recognize in this account a very common form of scrofulous disease of the hip joint. When I saw the child, however, all these symptoms had disappeared, excepting some remaining enlargement of the hip, and a little limping in the gait, arising from a trifling shortening of the limb. But the account thus given of the child's condition, when she first went to be submitted to the treatment, was fully confirmed by the testimony of more than a dozen persons who saw the child when she was first brought to Graefenberg, and who had watched her pro-

gress with great interest. But besides this, the shortening of the limb, the appearances of the hip, with the general constitutional aspect of the little patient, were precisely such as would have led any surgeon to foretel, without information, that the patient had suffered, or was about to suffer, the peculiar train of symptoms which the governess mentioned.

When I left Graefenberg, I saw this child galloping about in the snow, by the side of her governess, without anything to distinguish her from a perfect healthy child, excepting a little limp in her gait.

Scarlet Fever.

In the month of May, 1842, Mrs. Klauke, (aged about 25,) was seized with pains in the head and back and calves of the legs. Her face, neck, arms, and legs, and subsequently the whole body, became brightly scarlet, and she complained of a soreness in the throat. The pulse was rapid, and skin dry. She was packed in the lein-tuch for half an hour; then rubbed all over in a tepid bath for twenty minutes with the wet hand. She was now ordered to wear an umschlag round her stomach night and day. When she felt cold, she was rubbed down with the wet sheet—when hot, packed in the lein-tuch; and so on all through.

The tepid bath was suspended, until by the application of a succession of sheets the fever was reduced. Then the tepid bath was repeated. Every morning she was packed up in a blanket, in which she was allowed to perspire for an hour; then she was put into the tepid bath. This treatment was continued for a fortnight. At the close of the

sixth day all fever was extinguished, and at the close of the whole treatment her strength was undiminished.

In addition to the above a lavement of cold water was administered every night. During the whole time she ate and drank as usual, and one evening went to a ball, (in the saloon of Priessnitz's establishment,) and danced for hours, whilst her whole body was crimsoned with scarlatina. On returning home from the dance she was rubbed down with a wet sheet, went to bed, and slept soundly.

Symptomatic Fever. (Related by the Mother.)

Alexander Klauke, aged three years, was a fine lively child, but with a disposition to inflammatory affections of the stomach and bowels. A month previous to the present disease he had an attack of inflammation of the stomach, accompanied with strong fever, and determination to the head. In the evening the child was put into a bath not quite cold, in which he remained about twenty minutes, additional cold water being added as the temperature arose by the heat from the child. During this time cold water was poured from a tumbler glass on the head, repeated at intervals of a minute, and, as is usual, his whole body was rubbed cautiously, by the maid. He was then taken out of the bath and placed on the sofa, covered over with a sheet and blanket, with the back part of his head in cold water, for ten minutes. By this time reaction had taken place, when wet compresses were applied to the head and back part of the neck, and the body, from the armpits to the hips, wrapped in a similar way. He slept quietly till three o'clock in the morning, when the same process was

repeated, the previous symptoms having returned. The child was again placed in bed, where he slept till morning, and was then found to be quite well, and went out as usual.

A month after this attack he was taken ill in a similar way, but with symptoms much more severe. The fever running high and accompanied by delirium. The treatment was commenced by placing him successively in nine wet sheets, from which the water was but slightly wrung out. In each of these he remained about five minutes. Towards the last, the heat being diminished, he was allowed to remain ten minutes. To the head and breast a thick wet compress was applied in addition, these being the parts where the heat was greatest. The feet were cold, and as long as they remained so, the wet sheet was only applied down to the knees; in the mean time the feet and legs were rubbed strongly with the hands. While the extreme heat continued, the wet sheet was covered by a thick dry one instead of a blanket, as is usual, the feet only being covered (with the blanket). After the last wet sheet he was placed at once in a tepid bath, where he remained an hour, the same process of rubbing and pouring water over the head being practised. The first day the same process was repeated four times, the duration of the last being not so long, when the fever was not so high. During the night the wet cloth was changed every half hour. On the morning of the second day the child refused to go into the water, calling out himself at intervals for additional wet sheets. Orders were given that the inclination of the child should be obeyed. In the course of the morning the child desired himself that he might be put into the bath, where

he remained until the heat in the armpits and on the back of the neck was the same as on the rest of the body ; this being the general guide for the duration of a bath.

The same treatment slightly varied was continued four days, when the child was well, and was sent out to play with the other children. In eight days after this a pustule appeared on the foot, which discharged matter freely.

Catarrh, or Cold.

Mrs. —, an English lady now at Graefenberg, on her husband's account, was subject, in England, to very severe attacks of catarrh, which usually lasted her a month before she could get entirely rid of it. Soon after her arrival at Graefenberg she had a very severe attack. She was treated by the wet sheet and tepid bath alternately for *two days*, which entirely removed every trace of the catarrh.

Baldness.

Assessor Willert came under the hydrotherapeutic treatment for a very old rheumatic affection. When he arrived at Graefenberg his entire head was perfectly bald and smooth. I had an opportunity of examining his head soon after I myself reached Graefenberg ; which I did with the more care, having heard that it was expected, during his treatment, that his hair would probably return. Shortly before I left Graefenberg I was requested to go and examine Assessor Willert's head once more. I did so, and found it everywhere covered with a fine new hair, nearly half an inch in length. There can be no doubt whatever that this gentleman's head will shortly be covered with hair as luxuriant as at any former period of his life. His age, judg-

ing from his appearance, (for I did not inquire,) is about seven or eight and thirty.

Head-Ache, with Giddiness.

To Herr Slatinsky, a gentleman (about forty years of age) whose case I am now about to relate, I was introduced by Mr. Niemann. On going to his room I found his body literally covered all over with large dark brown spots, some about the size of a farthing, some as large as a half-penny, and others somewhat larger, and many of them running one into another, giving to his skin a dark marbled appearance. He had also had crises in another form about his legs and arms, very much resembling what, in England, are commonly called boils. They seemed to me to partake of the nature of what are denominated, in medical phraseology, furunculi—not malignant, but in a very mild form—discharging a ropy matter from one small pin-hole in the centre. All these, excepting one on the breast, were perfectly healed.

The eruption on the body, however, had but just made its appearance, and the patient was in high glee, and exhibited his mottled skin with all the pride and satisfaction with which a man exhibits to his friends some long-desired object—a horse for instance, or some precious antique—which he has just succeeded in obtaining after much labor and difficulty. The whole time he was undressing a smile of exultation was playing round his mouth, which plainly said: “What a happy fellow am I! and how much I am sure you will envy me when you see the treasure I am about to show you—the blessed blotches wherewith I am blessed!” And this is the feeling which is common to all

the patients at Graefenberg on the appearance of the crisis—for it is invariably hailed as a certain harbinger of a speedy and perfect restoration to health. As the crisis disappears the health returns—and I have never either seen or heard of a single case in which these eruptions did not entirely vanish again, leaving the skin perfectly healthy and clear as before.

For the three years previously to his coming to Graefenberg, this gentleman had been grievously afflicted with violent pains in the head, accompanied by dizziness. He was unable to attend to any kind of business. He could neither read nor write for more than two or three minutes together. He felt as though two nails, one on either side of the forehead, were being violently thrust into his brain. And he could never stoop nor turn round without imminent danger of falling. This was his condition for three years, from which all the ordinary medical treatment had failed to relieve him.

I forgot to mention that, in addition to his other sufferings, he was afflicted with piles.

On the appearance of the first crisis all his symptoms were relieved, but not removed. Since the appearance of the second, however, his head-ache, his giddiness, his piles, have entirely left him, and he now only waits till the critical eruption shall also leave him, when he will return to his country, his family, his friends, and his home, freed from a load of misery and disease which could not but render life rather a curse than a blessing.

Secondary Syphilitic Symptoms.

Count Pyatshavich, a Polish count, contracted syphilis.

Under a course of mercury all his sores healed except a large one in the groin, which resisted all medical treatment. His health at last began to flag. He lost both his flesh and his strength, and became reduced in substance even to emaciation. This state of things continued for one entire year, when, hopeless of relief by ordinary means, he yielded to entreaty, and, in spite of strong prejudice against the treatment, came to Graefenberg. In six weeks he was perfectly well, and I myself saw him depart, the picture of health and strength—a fine young man standing six feet without his shoes, and as strong as a giant.

Another Case of Secondary Syphilis.

—Robertson, Esq., a Scottish gentleman, contracted chancre in Sicily, 1838, which was healed by external mercurial applications. He took mercury internally also, but it failed in producing ptyalism. The chancre returned in a short time, and continued to heal and return at intervals, during the space of six months. During these six months he took *four pounds by weight of Lafecteur's rob* (a concentrated preparation of sarza and other drugs,) and sixteen pounds by weight of Dupuytren's rob. He was then ordered to rub in mercury for what were called secondary ulcers; and these ulcers never healed until all these medicines and all mercurial applications were discontinued. But under the use of simple purgatives, washing the sores with nothing but goulard water, they healed in eight days. But by this time his system had become so broken up that pressing fears were entertained for his life. He had become quite emaciated—the slightest exertion, or a sudden

noise, would cause him to faint—his spirits were depressed even to frequent weeping—the inside of his mouth, his tongue, cheeks, and throat, were covered with excoriations and sores—the skin of his face and forehead was covered with blotches—and his stomach and bowels in so irritable a condition that when he took a plate of hot soup he was obliged to sit upon a commode while eating it. For this excessive irritability he was obliged to take large quantities of opium, which he did under the advice of his physician.

At this time the joint of his knee was larger than the thickest part of his thigh. He was now removed to Naples, and placed under the care of another physician, who gave him iodide of potassium. From this he derived great benefit, the sores healing and the blotches disappearing. He was desired to travel, but never to return to a hot climate. His health now became considerably better, but the disease was still in him, for it was not long before the blotches returned, and he was obliged to have recourse again to the iodide of potassium. And indeed he soon found that, in order to keep the disease under, it was necessary to take the iodide of potassium constantly. He now took warm sea-bathing at Peterhead, which brought out several ulcers in the part first affected. After this he took sulphur baths, and also some iodine administered by Mr. Callaway, one of the surgeons to Guy's Hospital in the Borough.

He now came to Graefenberg, and submitted himself to a full course of the water-cure. When he came there, the skin of his face was so excessively irritable that he could never go out without an umbrella to protect his face from the wind.

He had not been under the treatment long before the dis-

ease, which had been hitherto only suppressed, was driven by the water to the surface of the body. He became covered with venereal eruptions, and no fewer than twenty-one ulcers reappeared on the part originally infected. As soon as these appeared, his general health began to mend, and in a few months he was perfectly well, and offered for a wager of any amount to walk eighty miles in two days—forty miles each day. He has just left Graefenberg for Vienna, and related his case to me only a few days before he went. This gentleman was so popular at Graefenberg, and (having the command of several languages) so kind in interpreting for foreigners when they first arrived, that a dinner was given to him at Friewaldau, at which I had the honor to be present.

This gentleman also mentioned to me a case of gleet which came immediately under his own notice. It had existed for seven years, and obstinately withstood every mode of treatment which could be devised. Under the influence of the water treatment he got perfectly well in a few weeks.

Third Case of Secondary Syphilis.

Mr. Kindermann, a government reporter at Frankfurt on the Oder, was affected with secondary symptoms. He had a venereal fungous growth on the verge of the anus. There were also deep ulcerations on his thighs. Having failed to obtain any relief, and his health having been to all appearance utterly ruined, it was proposed to convey him to La Charité, the great hospital at Berlin, as a last resource. His physician, however, declared that such a step would be perfectly useless, and nothing could save his life. Soon after

this he was strongly urged to visit Graefenberg, whither he was conveyed in the latter end of March last year. In the beginning of July of the same year he left Graefenberg in perfect health and strength, and is now again residing at Frankfurt on the Oder.

This gentleman is about twenty-six years of age.

He sweated every morning, with cold bath—two leintuchs in the afternoon with cold bath again—once a day he took a sitz-bath—and he wore umschlags night and day. He was covered with crises, observed a strict diet, and almost lived in the open air.

Fourth Case of Secondary Syphilis.

About seven years ago Herr Von Goltzsch contracted chancre, which was cured by mercury. From that time his general health began to decline. Every now and then he had sore throat, and was scarcely ever free from what he at that time believed to be rheumatic pains. For six years this state of things continued, during the whole of which time he was so weak that a strong child running against him was sufficient to push him down. At last his shin-bones became attacked with the most excruciating pains the moment he became warm in bed, which made it impossible for him to sleep. Shortly after this, nodosities made their appearance along the whole course of the bones. He was now strongly urged to come to Graefenberg, where I had the pleasure of seeing him, and of examining his legs. He has been under treatment for eight months, during which time his throat has not once been sore. He has entirely lost all his pains, and, on questioning him as to the state of his physical strength, his emphatic reply was: "When I

came here I was as weak as a child ; but now I would not turn my back upon ten devils."

Impuissance, complicated with Gout.

The uncle of the reigning Duke of Nassau, between sixty and seventy years of age, had been afflicted with gout so severely, that when he arrived at Graefenberg, he was almost bent double. In addition to this he had become impuissant.

He remained at Graefenberg for two years, married while there, and in due time became the father of two children ; and was, moreover, perfectly cured of the gout.

There are probably no two affections over which the hydropathic remedy exercises a more marked and beneficial influence than it does over the two just mentioned.

Contracted Joints.

A Hungarian girl was brought here with the knee joint so much contracted that she was obliged constantly to walk with two crutches. In six weeks she left Graefenberg walking exceedingly well without any crutch at all.

Hernia.

A young man affected with inguinal hernia, consulted a surgeon at Milan, who undertook to cure him.

The surgeon applied a plug of wood to the rupture, supported by a strong band of iron, which produced ulceration to a great and painful extent. At the end of six months the hernia was no better, and he suffered severely from the ulcerations.

He then repaired to Graefenberg, where he has been

prosecuting the hydropathic treatment for six months. The ulcerations are quite healed, and his rupture so much better that he has already left off his truss, and Priessnitz assures him that there is no doubt of his perfect recovery.

Hæmaturia, or Voiding of Blood from the Urinary Organs.

Herr Zelowski had bleeding from the urinary organs almost daily for six months before his arrival at Graefenberg. On one occasion he voided a large tumbler-full of pure blood. He was also the subject of piles. After ten weeks of treatment he was entirely free from both disorders. He gave me the history of his case himself, on the evening before he left Graefenberg.

Cerebro-Spinal Disease.

Monsieur De Gallette, an officer in the Imperial Guard of Russia, aged thirty five years, was affected about two years since with severe giddiness in the head. He could not look vertically upward without falling either on his knees or on his side. Any sudden motion of the head deprived him in a moment of the use of his lower extremities, which immediately yielded to the weight of his body, and let him down.

He lost also the perfect command of his tongue, so that he could not articulate the words which he desired to utter. His memory too quite failed him, and all his faculties were so disordered that he became quite foolish and unfit for society. One day, in a room full of company, he took up a decanter of water and emptied it completely upon his own head, not knowing what he was about, and wondering where

the water came from, which was running down his clothes. This gentleman has been four months under the water-cure. His giddiness has left him, he can articulate every word with the greatest facility, he has quite recovered his memory, and all his mental faculties are as perfect as ever they were. He complains now of nothing but physical weakness, from which, however, he is daily recovering. But the most remarkable part of this case still remains to be told. This gentleman has been quite bald for *fifteen years* over the entire roof of his head, and down on either side to within an inch of the tips of his ears, for which he has always worn a wig. When he had related his case, he requested me and some other gentlemen to raise the candle and examine the bald part of his head. We did so, and then perceived that a fine downy hair is beginning to grow all over the bald part, which promises in a month or two entirely to cover it, and supersede the necessity of a wig. The hair is already a full quarter of an inch in length, but exceedingly fine. A hundred persons can vouch for the truth of this statement, amongst others Colonel Bowen, Mr. Hoppner, and Mr. Anthony, an English surgeon, who examined the case with me.

Suppressed Measles.

In June, 1812, Major Heise, in the Hanoverian service, while on active duty, had measles, during which disease he received orders to march to Valladolid in Spain, and performed the route from Madrid to Valladolid on horseback. On the march he was exposed day and night to the open air. The measles suddenly disappeared. Six months after this his body and limbs became covered over with a dry

scaly eruption, exhibiting a yellowish brown patchy appearance, when the scales fell off, accompanied by intolerable itching. Every expedient was tried in order to get rid of this eruption. He visited the baths of Germany, Switzerland, and Italy. He took Russian vapor baths for twenty years. But all perfectly in vain. Six years ago he was attacked with diarrhœa and prolapsus ani, occasioning from ten to twelve motions daily, with constant desire to return to the water-closet. With these symptoms he came to Graefenberg. Added to this, he had nervous twitchings of two years' standing. Two weeks after he had been under treatment he had fever, with delirium, with loss of sleep and appetite, for which he took lein-tuchs and tepid bath. This lasted a week, and was succeeded by good appetite and returning strength. Crises, consisting of furuncles, now set in, which lasted nine weeks. At the end of three months he was ordered to go to Vienna and to adopt the following more moderate treatment, viz., three abreibungs daily. Five days after his arrival, diarrhœa and frequent desire for stool left him. At first his treatment consisted of lein-tuchs, cold baths, sitz-baths. On returning from Vienna he took six lein-tuchs of half an hour each, and each being immediately succeeded by a cold bath daily—douche for five minutes daily. Umschlags were worn night and day on his body, legs and head. He was here six months, at the end of which time he went away perfectly free from all pain, in fresh and strong health, and in all respects perfectly well. Just before I left Graefenberg, Priessnitz received a letter from Major Heise, in which he expressed his great gratitude for his recovered health.

Ague.

A general officer in the British army, well known at the Horse Guards, still staying at Bœmischdorf, and whose permission I have to give his name to any private applicant, was attacked with ague. After enduring two or three fits, in the hope that it would leave him, he sent for Priessnitz. When Priessnitz arrived he was in the third or sweating stage. He was immediately placed in a bath at 16 degrees of Reaumur, or 68 of Fahrenheit. Here he was kept for twenty minutes, being well rubbed all the time by two men. After this he walked about the apartment for half an hour, and then went to bed. The ague left him and never returned.

Deafness.

Colonel Bowen, late of the Guards, has been residing at Graefenberg seven months, without the slightest benefit in his own case. He cannot, therefore, be reasonably supposed to be blinded by any violent prejudices in favor of hydro-pathy. But he related to me the following circumstances concerning an intimate friend of his own—and it was afterwards confirmed by many others who were themselves under treatment at the same time with the colonel's friend. General Baron Esch, lately dead, but at that time commanding the cavalry at Prague, a gentleman extensively known in the military world, and who made his first campaign with the Duke of York, at Dunkirk, in 1799, was afflicted with deafness, of several years' standing, and which had resisted the most judicious treatment. He was at last prevailed on to submit himself to the water remedy—and in

six weeks he had *perfectly* recovered his hearing, in the fullest sense of the word. Witnessing, with his own senses, the singular effect which had thus been wrought on his friend's ears, it was *this* which determined Colonel Bowen to try the *same* remedy on his own eyes—but hitherto without effect.

Epilepsy.

The next case which I shall mention is one of epilepsy. On being introduced to this patient, a young Hungarian of about 27, he told me that he had been the subject of epilepsy for four years, having a recurrence of the fits about every ten days. He had been under treatment for four months, and was kept on a very scanty diet the whole of that time. He is now perfectly recovered, having had only one fit since he commenced the treatment, and that occurred *shortly* after his *first arrival* at the establishment. He was very pale, and considerably wasted, but was then gradually returning to a full diet, with a view to his returning home.

I suppose this case to be one of epilepsy, depending on irritation, set up in the brain, by the presence of some foreign body, probably a clot of blood; and that this clot, under the deprivation of food, had entered into combination with oxygen, in order that it might assist in protecting the vital organs from the destructive action of that element, and had quitted the system in the form of oxydised products. The cases of palsy probably depended on similar causes, which are removed by similar means.

This gentleman has made copious notes, both of his case

and his treatment, which he intends to publish as soon as he returns to Pesth.

Hypochondriasis, Psoriasis, and Sciatica.

The gentleman, (an Englishman,) about 60 years of age, who was the subject of these three severe afflictions, belonged formerly to the civil service in India. I made his acquaintance at Graefenberg immediately on my arrival, and am indebted to him for introductions to several valuable cases besides his own. He had labored under these affections for eight years. Shortly after he had become the subject of sciatica and psoriasis, (which latter disease his French medical advisers denominated *dartre farineuse*,) his mind became excessively excited by some family occurrences, with the particulars of which he did not, of course, think it necessary to acquaint me. In a short time, what with this excitement, the torture arising from his sciatica, (inflammation of the sheath of the great sciatic nerve where it passes through the structure of the hip,) and the intolerable *itching* produced by the skin disease, the equilibrium of his mind became so much disturbed that he was not considered in a fit condition to be left by himself. Always in a state of high excitement, there were times when he was perfectly insane.

For eight years the sufferings of this poor gentleman, bodily and mental, were indeed awful. When I asked him to give me a detailed account of his sufferings, he sat thoughtful for a moment, and then, going to a table, he took up a small pocket book, and opening it at a particular page, and placing his forefinger between the leaves, he re-seated himself. "Some time ago," he said, "I was per-

using the book of Deuteronomy ; and in the course of my reading, the passages which I have copied into this pocket-book riveted my attention. They were so exactly characteristic of my sufferings, that I almost fancied myself the particular object of the divine wrath, and that I was even then realizing the fearful denunciations which those passages of scripture contained. No language of mine can so truthfully or so forcibly convey to you the horrors under which I was laboring both in body and mind. Read them," continued he, "and judge whether I have not great reason to be thankful that I am *now* such as you see me." He handed me the book, and I read as follows : "The Lord will smite thee with the botch of Egypt and with the em-erods, and with the scab, and with the itch, whereof thou canst not be healed. The Lord shall smite thee with madness, and blindness, and astonishment of heart. The Lord shall smite thee in the knees, and in the legs, with a sore botch that cannot be healed, from the sole of thy foot to the top of thy head : and thy life shall hang in doubt before thee ; and thou shalt fear day and night, and shalt have none assurance of thy life. In the morning thou shalt say, 'Would God it were even;' and at even thou shalt say, 'Would God it were morning!'"

"At the time," continued he, when I had done reading, "that I was perusing those passages, those terrible denunciations were most of them actually realized in my person. I trembled as I read—for at that moment I was covered, '*from the sole of my foot to the top of my head*' with an intolerable itching botch. I was even then '*smitten in the knees and in the legs with a sore botch,*' and was covered with *scabs*. Madness, and blindness of the understanding,

and astonishment of heart, were also mine. I had indeed '*no assurance of my life,*' for I was often sorely tempted to destroy it ; and every morning I wished it were night, and at night I longed for the morning—and every effort I had made to get '*healed*' had been utterly in vain."

This gentleman had then been under the water-cure about three months. His sciatica had entirely left him—the eruption was nearly gone—the itching had wholly ceased—while the state of his mind was perfectly calm, cheerful, rational, and full of thankfulness.

So fully satisfied was he that he should get entirely well, that he left Graefenberg about a week before myself, in order to bring the whole of his family back with him—partly that he might have the comfort of their society for the rest of the time that it would be necessary for him to remain under the cure, and partly in order to submit his daughter, who had ill health, to the same remedy which had proved so signal a blessing to himself.

CHAPTER II.

THIS chapter is composed of a list of cases given by Sir Charles Scudamore, M.D., F.R.S., of London, a gentleman well known for his writings, some of which were, years ago, republished in this country. Sir Charles, in April and May, 1843, made a medical visit to Graefenberg, for the express purpose of investigating the merits of the Water-Cure Treatment. He also submitted his own case to the treatment, as will be seen by the following case :

Nervous Headache, Deafness and Constipation.

That I may present to the reader a familiar picture of the nature of the different processes of water-cure, I will give some account of my own treatment; adopting the maxim of Seneca,

“ Longum iter per præcepta, breve et efficax per exempla.”

I have for many years experienced inconvenience from rheumatic and nervous head-ache, with noises and deafness in the left ear; always dependent on medicine for the function of the bowels, yet very seldom requiring active treatment.

I waited a few days, to recover from the fatigue of travelling, before I began the treatment. At 6 A. M. Tuesday, April 18, I was visited by Priessnitz and the bath attender,

who rubbed me down with the wet sheet for two or three minutes ; following it with an equally diligent application of the dry one. The cold application being accompanied with such immediate friction, no severe shock was experienced. It was merely disagreeable, and that only in the first impression. The reaction was quickly established, and a safer mode of bathing cannot, I think, be imagined. The best results must follow from this effective cleansing process for the skin, tending to maintain it in health and to remove its diseased conditions. By the recommendation of Priessnitz, I put my flannel waistcoat over my linen.

The wet bandage was applied round my body, the dry part being closely rolled over it. The cold sensation was unpleasant at first, but quickly removed by exercise. I next used hand-rubbing for my head most freely with cold water in a basin, and was careful, by Priessnitz's desire, to chill the nape of the neck. I next took a long walk, and drank three half-pints of water at suitable intervals.

At 11 A. M. sheet process repeated, and, in addition, a sitz-bath, with water at 65° Faht. to reach to the navel. I continually rubbed the abdomen and loins with the water, and remained a quarter of an hour. The unpleasant first impression does not last more than a minute, and it is not disagreeable to remain for any length of time, unless the water should be changed. At 5 P. M. this treatment was repeated. I came in from a walk, much heated by exercise in the sun, waited a few minutes till the pulse became quiet, and then had the wet sheet applied with a most refreshing and satisfactory effect.

19th. Placed in the wet sheet ; the first lying down on it and investment with it were very disagreeable ; but, im-

mediately after the packing up with the blanket, &c. sufficiently comfortable; and, in a few minutes more, so much so that the effect was quite soothing and tending to sleep. At the end of three quarters of an hour, warmth came which would have produced perspiration, and, this not being desired, I was taken out, and immediately entered the shallow bath, at 62° , and was well rubbed with the water for about two minutes. The immersion being so slight, the impression of the cold water was very bearable, and the warmth of surface was afterwards quickly restored. Rubbing wet sheet at 11 A. M. and at 5 P. M., this and the sitz-bath at 62° . Each time rubbed the head.

20th. Same treatment. Examined my animal heat before being rubbed with the wet sheet; it was 97.5 , and the sheet 50° ; no alteration produced—shewing the mildness of this refrigerant process.

After the lein-tuch this morning, went first into the shallow bath at 62° , and then into the plunging bath, which was 44° , and cutting cold; returned quickly to the shallow bath, which now seemed pleasantly tepid. I found the animal heat reduced one degree by the plunging bath, although the sensible reaction was excellent; and, after the dry rubbing and dressing, I was comfortably warm.

23d. Same treatment. In using the sitz-bath found the temperature of the water raised by the warmth of the body 2 degrees in 5 minutes, 4 in 10, and 6 in 15. Hence the necessity of a change of the water, if a continued cold sitting be desired.

Being, in the common language, bilious from the change of diet, and such a free use of milk mornings and evenings, the bilious secretion suspended with loss of appetite, took

blue pill and colocynth at night, and next morning the improved Cheltenham salts. It was my object to save time; and I was confident that I should have this error more quickly corrected than by leaving it to the sole influence of the water-cure treatment.

25th. I used the lying sheet and shallow tepid bath yesterday, but no other treatment. Every success and benefit from the medicine.

26th. To-day resumed the plunging bath, and went on with the same treatment to the end of the month, but changed the mid-day process for the use of the regular head-bath and foot-bath; having recourse to the latter also, from being much subject to coldness of feet. I received the head-bath for a quarter of an hour, allotting five minutes to the back, and the same to each side of the head.* I lay on the floor, and had a good proof of the superior conducting power of air over water for sound, in the strong perception of any contiguous accidental noises. From this application of cold water I always felt sensible invigoration of the nerves of the head.

The foot-bath was also sensibly useful, tending to comfortable warmth of the feet; and the further rubbing of the ankles and muscles of the leg much relieved the consequences of fatigue.

May 1st.—In using the lein-tuch this morning, applied a long towel, wetted, from the arm-pit down the side, and found its effects agreeable; the sensations, from the complete contact of wet linen, more pleasant on that side than

* I find a shallow wooden vessel, with a rounded groove to receive the neck, answer the purpose for this process very well.

the other. Indeed, the effect of this process is very soothing ; and it becomes a punishment to be unpacked. Every one would willingly go to sleep in the wet sheet. If, in any particular case, the feet fail to become warm with the rest of the body, socks may be worn.

May 5th.—To-day used the douche, the temperature of which was 44° , for two minutes : it immediately reduced the animal heat one degree ; but I had a comfortable reaction. I felt very sensibly how much the most active this is of all the processes, when the douche is strong and the water cold. I used it afterwards occasionally during my stay, but not regularly, as I did not require full treatment.

I proceeded regularly till the 16th, when I tried the experiment of lying on three wet sheets instead of one. The first impression on lying down was that of greater coldness ; but, when packed up, this subsided into a sense of pleasant coolness that was refreshing. This remained, so that at the end of an hour and a quarter I was not warmer than I had been in ten minutes with the one sheet. It was particularly agreeable that the back remained cool so long. In an hour and a half, I had the same general warmth as with half an hour of the one sheet. In another quarter of an hour, I was becoming so warm that the animal heat had risen half a degree. Had I remained longer, I should, doubtless, have perspired freely. I was much satisfied with the experiment, as shewing the long-continued refrigerant power of the three sheets, in comparison with the one.

Two days after, I made the experiment of using the sweating blanket. On awaking at 5 A. M. I had some head-ache : pulse rather full, at 56° ; animal heat 98° . In the course of ten minutes after being packed up, I was com-

fortably warm ; least so in the feet, where I desired more weight. At the end of an hour and ten minutes, when the warmth of the whole body was much increased without sensible perspiration, the pulse was increased to 66°, full and soft ; the animal heat 99°. At the end of two hours, the perspiration was universal, but not copious, pulse 68, animal heat 100°. In another half hour, perspiration in a greater degree, but not streaming, pulse 68, animal heat 101°. At the end of two hours and three quarters, I quitted the bed, for the full bath, into which I plunged instantly, while hot and perspiring, made two immersions, and came out exceedingly refreshed.* On being dressed, the pulse was as in the beginning, and the animal heat 97·5.

On the following day, returning from a long mountain walk, the sun shining, my pulse was excited and my animal heat 101°.

I waited a few minutes only for a quiet circulation ; I wiped off the flowing perspiration, and then, while yet hot and perspiring, was freely rubbed down with the wet sheet, holding more water than usual. I was highly refreshed and agreeably cooled : my pulse became natural, and the animal heat, examined during dressing, was 98°.†

* It is to be considered that with the elevation of the animal heat, the nervous energy also is simultaneously increased, or more diffused.

† In a paper on heat, which I had the honor of reading at the evening meeting of the College of Physicians, March 5th, 1838, I quoted the experiment of Sir Joseph Banks, Dr. Fordyce, and others, shewing the impunity of passing immediately from an apartment heated to 260° Faht. into a very cold atmosphere ; the effect indeed being agreeable, refreshing, and useful.

Hence another proof of the perfect safety of applying sudden cold to the heated body with perspiring surface, when the animal heat is raised beyond the natural standard.

I proceeded with regular treatment to the 20th, and then desisted. After this period, in consequence of a severe cold from remaining in wet clothes, when I had no opportunity of changing them, I was attacked with slight general fever, rheumatic pains, and severe throbbing head-ache. I immediately had recourse to a lein-tuch, followed by the shallow tepid bath, and two affusions with cold water. The relief was immediate: the animal heat, which had been increased to 100° , was immediately reduced to 97.5 . One repetition of this treatment was so successful, that in twenty-four hours I found myself quite well.

The final result of the whole proceedings has been a most satisfactory improvement of my health, in all the failings which I mentioned; and I have not found the least occasion for medicine during the last two months. On my journey homewards, which was most extremely fatiguing, I took every opportunity in my power to use, on first rising, the rubbing wet sheet, hip bath, head and foot bath, and always with the greatest comfort and advantage: a plan which, together with early rising, drinking cold water freely, and an active walk, I follow up with the highest advantage and sensible comfort and benefit.

In relating the following cases, I avoid all mention of names; knowing that the violation of this proper delicacy has given great offence at Graefenberg, and disturbed the feelings of many persons.

Indigestion, Severe Head-Ache, &c.

A. B., aged 44, for the last seven years during a residence in India, liable to severe head-aches ; complaining frequently of heat on the top of the head, and a weight at the back. After a time, these head-aches became much worse periodically, accompanied with sickness approaching to faintness, and a momentary loss of recollection. These periodical returns at length becoming so frequent as every twenty-five days, and the illness much more severe, accompanied with pain in the lower part of the spine, he was advised to try change of air from the sultry climate of India, to the Neilgherry hills, where, during a residence of two years, he became much better, the periodical returns being forty-five and forty-six days apart. As his general tone of health improved, the illness also became slighter. His health not being however established, he was directed to return to his native climate, and proceeded to Europe by the overland route, via Malta, where he changed his route, and proceeded to Graefenberg, via Naples, Leghorn, Florence, Trieste, Vienna. During this journey, his complaint returned every twenty-sixth, thirtieth, or thirty-sixth day, and the illnesses were not so slight as they had been during the latter period of his residence on the Neilgherries. He complained a good deal of cold feet and frequent head-aches. The latter might perhaps be attributed to improper diet at the hotels, and the fatigue and irregularity incident to travelling. It was the opinion of his medical friends in India, that there was no organic disease, and that his complaint was to be attributed to indigestion and the exposure to the climate of India. He had a return of illness on the 29th of March, in the

carriage between Olmutz and Graefenberg. Priessnitz saw him on the 30th, and commenced treatment on the 31st, with *abreibung* and head-bath, the back and sides being immersed for a quarter of an hour. On the 1st of April, he had *lein-tuch* at 5 A. M. followed by a tepid bath. *Lein-tuch* again at 12, followed by an *abreibung* and head-bath; at 5 P. M. an *abreibung*. This treatment continued until the 20th of April, when he had a return of illness in the night. Priessnitz being sent for, he directed his head to be wetted before using the *lein-tuch*, and an *abreibung* after it, instead of the tepid bath; the *abreibung* to be repeated at 9 A. M., 12 noon, 3 P. M., 6 P. M., and 9 o'clock P. M.; in addition to which he was to have an *abreibung* every fifteen minutes for one hour after the faintness. This treatment of six *abreibungen* a day and *lein-tuch* at 4 in the morning, head-bath at 9 A. M. and 12 noon, continued several days; was then reduced to five *abreibungen* in a day, then to four; and lastly, he went back to the former treatment, which continued until the first of May, when he had another return of illness. Priessnitz was then of opinion that the present treatment proved too severe for him, and must be modified; that the tepid baths were to be left off; but that he must continue the *lein-tuch* once in the day, head-bath once, four or five *abreibungen* in the course of the day, and a foot-bath twice in the day; and that as soon as the present illness had passed off, the head-bath was to be discontinued, and the head to be simply rubbed with water. He directed an *abreibung* every fifteen minutes, to be repeated four times after any faintness; also one foot-bath after a paroxysm. On being told that the patient was fatigued with the exertion of dressing and undressing every fifteen minutes whilst

ill, he directed that he should go into bed between each abreibung, be kept quiet, and that if he fell asleep, he was not to be disturbed.

During the first three weeks of the time that this gentleman was under treatment, he was *remarkably* well : had no head-ache whatever, and never complained of indigestion since the 20th of April (it is now 12th of May) ; he has occasionally complained of head-ache, but is nevertheless better than he was before he arrived ; his general tone of health is improved ; the pain in his back quite gone, so that he can run *down* a hill without uneasiness, whereas even walking fast *down* a hill formerly used to shake and jar his system. His feet are always warm ; he no longer starts in his sleep as he used to do, and can sleep on his back as well as on his side, which he could never do before, since he resided in India ; and he no longer complains of indigestion after dinner. Before adopting the treatment, he was always dependent on the aid of medicine for the bowels ; since, he has not had the least occasion for any. It must also be mentioned, that, although the two last attacks of illness occurred within very short intervals of time, the head-aches were slight and the illness only a mild one. His chest appears to me to have become wider. I saw this gentleman almost daily, and left him in a fair way of recovery.

Indigestion, Nervous Debility, and Hypochondriasis.

A gentleman, aged 25, had brought himself into a state of great nervous debility from excess of study. He was at length incapable of any mental application, had great nervous depression, and was hypochondrical. The sight so

much weakened that he could neither read nor write, and even blindness was apprehended. Often had severe headache. Greatly lost both flesh and strength; the digestive functions torpid. He related to me that he first came to Graefenberg three years ago, in the state of indisposition above described. His treatment then as follows: The plunging-bath in the morning on first quitting the bed. After breakfast, the douche from five to ten minutes, even in the coldest weather. In the afternoon, a sitz-bath for half an hour: drank water in the usual quantity. For five months there was no change in the treatment. He observes, "I had no crisis, not even the water-rash; my health improved gradually. After this, I returned home, where I used a cold bath every morning, and avoided all sorts of spices and fermented liquors. My health improved more and more; my eyes grew stronger again, I could read and write; and, of my former complaint, there remained merely a pressure on the chest; inability for strong mental exertion, accompanied with some dislike for society. Three months ago I returned to Graefenberg, when Priessnitz ordered me to be packed up in a wet sheet morning and afternoon, followed by the plunging bath; to douche for two minutes; to take two head-baths; and a sitz-bath for a quarter of an hour. He recommended me to make a practice of walking in the air with my head uncovered, however cold the weather." I saw much of this very interesting person, who quitted Graefenberg during my stay. He was quite well. The digestive functions became regular very soon after the commencement of the treatment. This is an example of no sensible crisis occurring, although the treatment was very active.

Asthma and Hernia, following Bronchitis.

A female servant, aged 35, has suffered from difficulty of breathing during the last five or six years, in consequence of an acute attack of bronchitis, which she underwent in India ; was unable to ascend a hill or to make any extraordinary continued exertion without much distress. Has also, during the last few years, whilst residing in India, suffered from severe affections of the bowels. One of these, the last, occurred in August, 1842, and was very severe, and attended with symptoms of much inflammation, for which she was leeches and blistered. She recovered but slowly from this attack, and it was shortly followed by psoas abscess, which pointed below Poupart's ligament (in the groin), and was opened. Towards the end of September, she was obliged to travel with her master and mistress on the way to Bombay, but was conveyed in a palanquin. During her stay in Bombay, in November, whilst still very weak, she was exposed, in a tent, to wet feet during an entire day, in the discharge of her duties, and caught cold, which brought on, as she states, inflammation of the bowels ; and being also at this time much occupied in the care of children, one an infant, and in the packing and lifting of trunks, her hernia (femoral) occurred at this time, on the same side on which the abscess had been shortly before. She continued in delicate health till her arrival in Malta, where she sought medical advice for the first time since the occurrence of the hernia in the end of February. She left her service early in March, being unable to carry the children, and went to Graefenberg, to place herself under the treatment of Priessnitz. She was very asthmatic at this time.

He commenced her treatment the first week in April, ordering her a lein-tuch every morning, to be succeeded by an abreibung, and this followed by a sitz-bath ; the abreibung and sitz-bath to be repeated at 12 o'clock, and the lein-tuch, abreibung and sitz-bath, at 4 o'clock P. M. every day ; to wear a wet bandage, night and day, round her loins, and to wear a truss upon the situation of the hernia, which was not to be removed night or day.

After having been a month under the fore-mentioned treatment, she complained of very severe pain in the region of the bowels ; upon being informed of which, Mr. Priessnitz directed that she should have an abreibung every ten minutes until she should obtain relief, and to walk up and down the room wrapped in a dry blanket between each. Every abreibung relieved her ; and when she had taken six, she became quite comfortable.

In the course of the treatment, the catamenia occurring, apprehension was entertained at the probable injury from continuing the treatment ; in consequence of which, the advice of Priessnitz was sought, and he directed that there should not be allowed any interruption. The effect was, complete relief from the distressing pains habitually attending the performance of this function, the quantity of the discharge was much increased, but did not continue longer than the usual time, and no weakness was experienced. Upon the return of the periodical function, the same relief from pain was experienced, the quantity was not excessive, the interval was nearer to the natural period than usual, and the discharge did not continue. She now enjoys good general health and strength (May 24th), and no longer suffers from asthma. Her hernia also she considers decidedly

better. The truss is still worn ; but she has not noticed, as formerly, any tendency to the descent of the bowel.

Nervous Debility from Excessive Study.

A gentleman, aged 25, tall and slight, had brought on debility by excess of study, attended with circumstances distressing his mind. For two years, suffered from great and almost continued pain in the head, chiefly in the back part ; with pains of the teeth and down the cheek ; constant noises in the ears. Was also generally weak, and in a very nervous state. Circulation irregular, with ice-cold feet. Bowels torpid. Had been at Graefenberg six months. The treatment :—Lein-tuch in the first of the morning for half an hour, followed by the abreibung. Both repeated in the afternoon. Used also daily head-bath, and foot-bath, the feet being well rubbed for half an hour. Was desired, in addition to the regular head-bath, to rub the head very freely with cold water, whenever it was painful. Drank water as usual. In the first week, the functions of the bowels became quite regular, and he was released from his former necessity of taking one or other kind of medicine. This benefit arising from the water-cure treatment is one of the highest magnitude, and happens, as far as my inquiry went, almost without exception. This gentleman assured me that he found himself well at the end of three months, and only remained at Graefenberg longer in order to confirm the establishment of his strength. It was pleasing to hear him describe the altered state of his nerves for the better, the loss of all pains of the head and face ; and the improvement of his circulation. He was no longer troubled with coldness of the feet.

Indigestion and Pain in the Side.

A gentleman, aged 40, arrived at Graefenberg, in a weak state, with bad digestion and constant pain in the right side. He went at once from the lein-tuch into the cold bath. He abstained from the douche when the weather was severely cold, and never took it more than two minutes. He was several months before he got a crisis; but was cured of his indigestion before that time. When the crisis came, it was on the opposite side, a large boil, very painful, accompanied by much irritative fever for near a week; but it has *cured* the pain in his side, for which he could get no remedy before.

Great Suffering from Nervous Weakness.

The wife of this gentleman was an invalid in many respects—had pains in the loins and in one leg; had for years been a great sufferer from general nervous weakness. She is now quite well.

Until the crisis, which appeared in the form of several large boils on one leg, her treatment was—lein-tuch one hour, then cold bath; at eleven, abreibung and sitz-bath; at half-past four, lein-tuch one hour; then, either the cold bath or abreibung, whichever she pleased.

When the boils were painful and discharging, she had tepid bath after lein-tuch, instead of cold bath. From being very debilitated, she has become strong enough for any exertion. This lady has returned to Graefenberg, out of gratitude to the place where she and her husband received the blessing of health. I saw him on the day of my

departure. They will now use only slight treatment, to confirm the general strength.

General Fever.

A gentleman, aged 44, of full habit, thus describes his case : " I was troubled and annoyed, four days or more, with pain of the left side opposite the heart. I met Priessnitz and informed him of it. He called the next morning at 9 o'clock ; the pain still continuing, he ordered me, at 11, to take an *abreibung* for five minutes, that is to say, I was to be rubbed, and rub myself, that time in a wet sheet, standing upright. I was then to wait ten minutes, walking about the room ; then take another *abreibung* for five minutes ; then to walk half an hour and take a *sitz-bath* for twenty minutes. All this I did. At half-past 3, I was ordered to do precisely the same things over again. However, after the morning operations, I found that I had taken a severe cold, or that the operations had made me ill. I had pains all over me ; my limbs, my back, and my head, were in pain ; and I became very hot and feverish. The pains and feverish symptoms increased ; at four o'clock, I took an *abreibung* five minutes, then walked about half an hour ; then I had a *lein-tuch* for one hour, then a tepid bath five minutes, at 68°. All the pains soon left me. I walked out for half an hour, had supper, and went to bed. At five in the morning, my attendant came ; and, as I had been feverish in the night, was so then, and had some pain in the head after the *lein-tuch*, which I took for an hour, I used a tepid bath at 64° for four minutes, receiving also one cold affusion over the head. Without further treatment, I found myself next day quite recovered.

Indigestion and Sore Throat.

(By the Patient, aged between 40 and 50.)

"I arrived at Graefenberg 15th July, 1842; my complaint, as described by my physician, being 'bad digestion and sore throat.'

"I have *always* been subject to irritation of the throat, more or less, from a boy: within the last eight years, it has troubled me more, and given either real or fancied cause of uneasiness.

"For years, previous to 1835, I was subject to *boils*, which gave me much pain and annoyance. Up to this period, my throat gave me little or no trouble; was generally, though relaxed, free from phlegm. The end of 1835, I began an aperient pill; I took one, generally, daily till 1842, up to the time of my coming here. Soon after I began to take this pill, *the boils ceased*, and my throat gradually grew worse: though I felt more comfortable in my digestion, my throat got worse—more and more troublesome.

"For nearly twenty years I had constantly taken wine and spirits *freely*. When I came here I was much more corpulent than I am now; and my whole system seemed deranged. I was nervous, and like a *barometer*. I could not venture, after exercise, into a church, or into any large cold building, for fear of taking cold, which I almost invariably did, and this always affected my *throat*; sometimes laid me up for a week in my bed-room. I attribute this sensitiveness to having taken, seven years ago, a quantity of mercury, which has come out here, making my mouth sore, and affecting my breath strongly occasionally. This, I believe, has now ceased. I am less sensible now to

changes of temperature. For years I have been unable to take walking exercise in a week, equal to that which I can now take in a day. Previously to coming here I always *rode* every where. I had pains in the stomach and in the feet, with redness in the hands and knuckles, and in the legs: in all these there is now no pain, having had crises in them. The arms are still painful, but I have had no boils or crises in *them* yet. My digestion is better, my throat is better, and progressively improving. I have no pain.

“*Treatment*, commenced July 16, 1842. The first five weeks, leintuch, at 5 in the morning, one hour; then, ab-geschreckte (tepid) bath, 13° Reaumur, 3 minutes; an umschlag round the body; then walk an hour; then breakfast; at 11, abreibung; then wait a quarter of an hour, then sitz-bath a quarter of an hour; then walk, then dine. The same at 4 p. m.; got better daily.

“For six weeks, all the operations, as above, were continued; and the douche at 9 a. m. for 2 minutes, which was gradually increased to 7 minutes, I took regularly for six months, and during the winter.

“The 9th week, in addition to the sitz-bath, I took the cold bath every morning; then—lein-tuch one hour, tepid bath one minute, cold bath 2 plunges, then tepid again one minute. I have lately omitted the douche and cold bath, in consequence of having crises. When I was first enveloped in the wet sheet, a strong sour smell, like mellow apples, proceeded from me, and filled the room; and was of so subtle a quality as to be with difficulty washed out of the blankets. I had never experienced this odor before. Priessnitz told me that it must all come out, for I could never get

better till it was entirely removed. This smell has not been perceptible the last three days.

“I have daily, by order, taken 10 or 12 glasses of water, 5 before breakfast, the rest distributed at intervals. Before breakfast, much mucus has been rejected from the stomach, very sour and bitter, sometimes of a green color, sometimes yellow. I have still eructations of water before breakfast, but not sour ; and now and then a little froth and phlegm. Upon the whole, I am quite satisfied, and consider my coming here providential ; for, in England, I could find no certain remedy for one thing that did not cause inconvenience and disorder of some other kind.

“When I shewed Priessnitz my throat, he said, ‘This is caused by your stomach, which must be set right before your throat will be better ; besides, your nervous system is all wrong ; but I have hopes I can make a different man of you ; you must get thinner, and then your digestion and throat will both get better.’ ”

He had pursued active treatment for ten months ; a duration that may appear surprising. The throat has been his greatest trouble. The mucous membrane had long been diseased ; and at one time the uvula had become so elongated, that a portion of it was excised. He might probably have desisted from such a regular proceeding as he was still pursuing, some time past ; but his determination was to stay at Graefenberg, under treatment, as long as a vestige of complaint remained ; so truly did he enjoy and estimate the great improvement which he had received. The odor of which he speaks was connected, I have no doubt, with the gouty diathesis. He had experienced occasional gout. He told me that, on his first arrival, he had scarcely the feel-

ing of energy to cross the road. I saw abundant proof of his acquired activity ; and he looked strong and well.

Inflammation of the Stomach and Bowels.

A fine, lively boy, aged three years, in general well, yet subject to inflammation of the stomach and bowels.

He had an attack of inflammation of the stomach, accompanied by sickness, with strong fever and determination to the head.—In the evening, the child was placed in a bath at 70° Fahrenheit, in which he remained 20 minutes ; cold water was added as the temperature rose. During this time, cold water was poured from a tumbler on his head, repeated at intervals of a minute ; and, as usual, his whole body was carefully rubbed. He was then taken out and placed on the sofa, and covered with a sheet and blanket, with the back of his head in cold water for 10 minutes. By this time, reaction had taken place, and when wet compresses were applied to the head and back of the neck ; and the body, from under the arms to the hips, was wrapped in a similar way. He slept quietly till three in the morning, when the previous symptoms having partially returned, the first treatment was repeated ; after which the child was again placed in bed, where he slept till morning, and was then quite well, and went out as usual.

One month after this attack, he was taken ill in a similar way, but with symptoms much more severe : the fever running high, accompanied with delirium. The treatment was commenced by placing him successively in nine wet sheets, from which the water was but slightly wrung out. In each of these he remained about 5 minutes ; towards the last, the heat being diminished, he was allowed to remain 10

minutes. The feet were cold; and, as long as they remained so, the wet sheet was only applied down to the knees; meantime, the feet and legs were rubbed strongly with the hands.

While the extreme heat continued, the wet sheet was covered by a thick, dry one, instead of a blanket, as is usual. After the application of the last wet sheet, he was placed in a bath of 70°, where he remained nearly an hour; the same process of rubbing and pouring water over the head being practised. The first day, the same process was repeated four times; the duration of the bath being not so long when the fever was not so high. During the night, the wet sheet was changed almost every hour. On the morning of the second day, the child refused to go into the bath, calling out himself, at intervals, for additional wet sheets. Orders were given that his inclination should be complied with. In the course of the morning, the child himself desired that he might be put into the bath, where he remained till the heat under the arms and on the back of the neck was the same as the rest of the body; this equality of temperature being the general guide for the duration of a bath. It is worthy of remark, that the more the fever was reduced, the more quiet the little patient became, till at last he remained in the bath perfectly tranquil. The same treatment, slightly varied, was continued four days, when the child was well, and was sent out to play with the other children. In eight days after this, a pustule appeared on the foot, containing matter, which discharged freely.

Observation.—This case might probably have passed into continued infantile fever had it not been in this manner promptly and successfully treated. When fever runs very

high, as shewn by the burning skin, delirium, and other symptoms, it is a good modification of the use of the leintuch to cover it with a dry sheet, instead of the blanket, and packing up in the usual manner.

Nervous Debility, with frequent Cramps.

A gentleman, aged 45, tall and stout, received two injuries of the head by a fall, one of which was in hunting, about seven years ago. The nervous system was much deranged, especially since the second accident, five years ago, when the spine received a strong contusion and shock. For a long time he had been very nervous, and unable to compose himself during any sedentary occupation; having also heavy and stupid feelings of the head; *muscæ volitantes*; constant singing in the ears; prickings and numbness of the limbs, with frequent cramps; unrefreshing nights, often sleepless, and in the morning more tired than when he went to bed. He neglected himself after the first accident; but after the second, having the use of the limbs so much impaired that it was with great difficulty he could walk half a mile, he went to Bareges: first used the baths at St. Sauveur, for 2 weeks; lay in them for an hour and a half to 2 hours: then, at Bareges, douched every day for 10 minutes; after which, was put into bed, where he had most copious sweating; and then, covered with a blanket, was carried to his lodgings. At the end of four months, his amendment was very satisfactory; and he quitted early in August. Relapsed at the end of the year, and passed a bad winter. Next year, he used hot sulphurous baths in Switzerland, with advantage, but remained a great invalid. He had several symptoms indicating a disposition to gout. He

did not use any further treatment till coming to Graefenberg, nine months ago. He has had all the processes, and been on full treatment, without having received any decided benefit to his nerves. Yet his muscles have become stronger, and his digestion is improved. He found it necessary to douche very cautiously ; for, if he received it with great force and much continuance, he found his head exceedingly disordered by it. It was his intention to give up the treatment and quit Graefenberg, if he did not improve in two months more.

It seems probable that more than functional error in the membranes of the brain and spinal marrow exists in this case, so persistent have all the distressing symptoms been. I do not expect that he will be benefitted by the water-cure treatment, and think that he might receive advantage from undergoing a regular course of alterative and purgative medicine, to be followed by the use of the baths and douche at Buxton. It is probable that he may have recourse to such measures, should he be finally disappointed at Graefenberg.

Nervous Debility and Sleeplessness.

A lady, aged 27, had typhus fever, from which she dates her loss of health. Subsequently, she had a fall from a horse, causing concussion of the brain ; and, on another occasion, a severe contusion of the head, with a wound by the falling of a beam. For a long while, she experienced intense sufferings, from which she never recovered ; and she came to Graefenberg with the following symptoms : frequent severe pains of the head, with a strong sensation of burning heat of the scalp ; hearing and sight affected ; al-

together in a highly nervous state, and seldom sleeping more than an hour in the night ; all the functions irregular ; the feet almost constantly affected with icy coldness ; with frequent pains and oppression in the hypogastric region. She had always received more benefit from cold water applications than any other means, and especially from using the *mer de glace* (a stream derived from the melting of ice and snow from the mountains), in Switzerland, as a bath. Very active medical treatment had been used at different periods ; leeches and blisters to the spine again and again ; and courses of medicine of various kinds.

On her arrival she was put on the following treatment. In the morning early, lein-tuch, tepid bath (Reaumur 14°), and plunging bath in immediate succession. Abreibung and sitz-bath in the middle of the day ; a regular head-bath once in the day ; and whenever painful and heated, to apply cold water freely by the hand, and leave wet compress on any heated part. The foot-bath once or twice a day ; rubbing the legs also with the water, for they were affected with weakness and swelling. An eruption of irritable pimples appeared, which was treated with wet bandages covered by dry. Priessnitz was glad to see this early crisis. The body bandage was used. She drank a medium quantity of water, and was much in the air ; but she could not take great exercise. At a particular period, the nervous system was greatly disturbed ; and there was some hysteria, with much affection of the head. In these circumstances, Priessnitz directed 4 abreibungen in the morning and 4 in the afternoon, with intervals of half an hour, during which she went into bed, to gain composure and

warmth. She did not complain of this troublesome treatment, and acknowledged the very sensible relief which it afforded her. On my quitting, I compared her state with what it was on her arrival, with great satisfaction. Her health was in every respect materially improved; and the head so relieved that she could sleep comfortably. There was every promise of the case proceeding to a favorable issue.

Indigestion, Distress, and Depression of Spirit.

A clergyman and schoolmaster, aged 35, had too intensely exercised his mind and feelings, and brought on so distressing a state of nervousness, that, in preaching, he became painfully confused in a quarter of an hour. He had severe indigestion with opposite states of the bowels, but most commonly inert; head-ache with confusion, noises of the ears, and dimness of sight; as in the last case, heat of the scalp and extreme coldness of the feet; depression of spirits, with distress that he was incapable of any mental exertion, being an ardent student. He was much affected by every change of weather. His treatment consisted of lein-tuch and tepid bath, with plunging bath, sitz-bath, head-bath 3 times a day, foot-bath twice a day, the soles of the feet being diligently rubbed; the body bandage. He drank water freely; and he had abreibung whenever the head was more than usually uncomfortable. After about a fortnight, the use of the douche was added to the treatment.

He described, in glowing terms, the happy improvement which he received after 10 days' treatment, and especially in his digestion and the state of his head; but when he

had employed the douche for a week, he was apprehensive that it did not suit his nerves, for his head became painful and confused after using it.

In all these cases of great morbid sensibility of the nerves of the head, it appears to me that the application of the volume douche, if ever used, should be much delayed ; and that the jet shower bath, applied with only moderate force, continued from one to three minutes, is a more appropriate remedy.

It is very obvious that, in the management of all delicate and difficult cases, a good medical judgment is required to adapt the treatment to the many changing circumstances which must occur.

Gout and Rheumatism.

A gentleman, aged 44, of slight frame and delicate appearance, had received great trials to his constitution, from living in various climates under circumstances of immense exertion of mind and body ; so that he incurred a severe liver disease, followed by both gout and rheumatism. His father had been a sufferer from gout and from tic-douloureux. He, therefore, had the hereditary predisposition. By treatment, his health was improved up to November, 1839, when, from exposure to wet in shooting, he experienced painful rheumatism or gout, for each name was given, in one knee-joint. It was so swollen and misshapen, that some thought it was dislocated. The frequent use of leeches ; of iodine, externally and internally ; of calomel ; sarsaparilla and other medicines, formed the chief treatment. The disease increased severely. He describes that "the leg wasted away ; that the hip had the appearance of being dis-

located; and that some inflammation became visible at the lower part of the spine, with frequent aching pain. The knee was so bent, from contraction, that the limb was drawn up almost to doubling, and quite useless; in addition to which, he was reduced to a skeleton, having lost all appetite and sleep." The actual cautery to the spine was proposed; but not having profited by any of the various means employed, he fell into despair, and was urged to try the water-cure at home. He here says, "I was so weak that I could only allow gentle measures. My diet was strictly regulated. I drank plenty of pure water; morning and evening had an abreibung and shallow tepid bath (66° Fah.); in the middle of the day, free ablutions of the whole limb, and wet bandage covered by dry. From the commencement I began to feel differently. Sleep and appetite soon returned; and, my strength gradually improving, I was able to bear the use of the sweating blanket, followed by the half-bath. Ere long, numerous boils appeared on the legs, which afforded great relief to the deep-seated pains." Had sitz-baths. In one month he was so much improved that he could use crutches for half an hour; and at the end of three months he had gained sufficient strength to undertake the journey to Graefenberg. But still having a very large number of boils in a state of suppuration, his nerves were greatly disturbed, and he was rendered very ill by travelling 500 miles; was much affected with cramps and hysteria. He arrived. Priessnitz told him he would recover, but a long time would be required. At first, his treatment was moderate, and afterwards increased, with a cautious use of the douche. He drank water very freely. For a time, its early morning use was slightly emetic; but

this relieved him of bile and phlegm. In October, 1840, he could walk a little with two sticks. The boils increased over the body. In November, the weather being unfavorable, he took cold severely from accidental exposure, and new symptoms arose. An abscess gradually formed between the bladder and the rectum, and at length broke; the matter being discharged partly by the rectum, and partly by the urethra. His cramps and pains of the bladder and bowels were so severe, that his life was in imminent danger. For a fortnight he was without sleep, could not take any food, and for ten days had water only to support him, if support it could be called. Cold-water lavements, half and quarter baths, fomentations, and wet linen rubbings, all more tepid than usual (80°), were freely employed. When the abscess found free vent, the symptoms so much abated, that a little sleep and the capability of taking some nourishment returned. He gradually improved, so that by the middle of January, 1841, he could again walk with two sticks about the house. Now more active treatment was resumed; and even the sweating in the blanket twice a week, and the cautious use of the douche. The progress of cure became very favorable. Before the end of summer he was able to take exercise and enjoy the mountain air; and appetite and sleep returned favorably.

In April 1842, he was sufficiently recovered to leave Graefenberg, with the use of the limb quite restored, all contraction being removed, and the general flesh, strength, and spirits quite regained. He was the wonder of Graefenberg! I saw this gentleman about 10 weeks ago. He was in good health and spirits; but felt the necessity of avoiding great fatigue; as in such case he was reminded,

by achings, that his limb, although so happily restored, could not possess the vigor of one that had never been diseased. In a review of all the circumstances of this important case, infinite praise was due to Priessnitz for its management. He had been indefatigable in his attentions.

*Syphilitic Eruption, Hernia, Sciatica, Biliousness,
Indigestion, &c.*

A gentleman, aged 27, tall and stout, very muscular, came to Graefenberg nine months ago, having a cutaneous eruption of a syphilitic character, a hernia humoralis, enlarged tonsils, sciatica, and great disposition to general rheumatism, with a bilious countenance, much indigestion, and great nervousness and depression of spirits. Priessnitz at once told him that his case would require a long period for the cure. The treatment was at first mild; but, without unnecessary delay, was made active; when he sweated in the blanket each other day; and, after four months' douching every day, had two sitz-baths every day, lasting an hour, the water being changed twice or thrice; with also abreibung, lein-tuch, head-baths, and foot-baths; for this patient was very liable to pain and congestion of the head, with great coldness of the feet. He was exceeded by none in his zeal in drinking water. His usual quantity was 16 pints daily; and one day he was ambitious to take four pints more; from which he had all the feeling of having drunk too much wine, attended with a vertigo; and being alarmed by these symptoms, he returned to and continued his former quantity without inconvenience. He had passed the last winter at Graefenberg, and was in the habit of

taking his first morning walk before the rising of the sun, and in an atmosphere of from 6° to 10° Faht. ; much enjoying the sight of the glorious orb first appearing in the horizon. After breakfast, he used with great satisfaction the icy douche ! for 8 minutes ; but when I found him at Graefenberg, the duration was 10, and twice a-day. He had been there nine months. He was the picture of health ; and described himself as being strong and free from all inconvenience. His muscles were large and firm, and many remarked that his chest had considerably expanded. In the general history which he gave me, he stated that in the first instance he had been freely treated by mercury and iodine, sometimes with the effect of removing the immediate symptoms ; but they recurred ; and at length, feeling much incommoded by the medicines, and having some addition of complaint, after an interval, he had recourse to the water-cure treatment. Under it, he had repeated severe crises of boils, from which he was persuaded that he had received most material benefit. In this case, the copious draughts of water certainly appeared highly useful, and particularly to the bladder, the mucous membrane of which had been so much affected, that in the beginning the urine was passed with great difficulty, and highly charged with mucus ; but it must be observed that, when using these great libations, he took immense exercise, often walking 6 or 8 miles before breakfast.

Indigestion, Rheumatism, and Spitting of Blood.

A gentleman, aged 40, tall and slight, appearing free from complaint, gave me the following account. When a boy at school in Germany, he was compelled, with the rest of

the boys, to take a purgative every Saturday morning ; and thinks that from this unfortunate and absurd practice he acquired the subsequent necessity, and that an increased one, of resorting to medicine. He was subject to great depression of spirits, inaptitude to exertion, rheumatic pains, shortness of breath on ascending a hill, and occasional spitting of blood of a scarlet hue. He had tried various medicines, and long persisted with a slight mercurial alterative ; but, he says, without improvement. He was dependent on lavements for any action of the bowels. He went to an establishment near his home, where he was sweated in the blanket every day, had the plunging-bath and other means ; but he did not feel equal to the perseverance in such treatment, and went to Graefenberg, where he had been nine months when I first saw him, remaining, however, more from choice than necessity. His treatment had been leintuch in the first of the morning, avoiding the perspiring, followed by the tepid and plunging baths in succession ; an occasional abreibung ; two sitz-baths every day, at first tepid, afterwards cold ; body bandage.* He drank from 10 to 12 glasses of water. After two months, he used a douche daily. His recovery was perfect, and he was an excellent specimen of the good effects of the water-cure. In a few weeks after using it, his digestion became quite regular.

Gout.

An Austrian officer, aged 47, tall and robust, had acquired gout in the ankle and side of the foot at 37, and since in various parts, never escaping a winter till the last, and hav-

* In future this is to be understood, if not mentioned ; the exception to its use being very rare.

ing fits of from 6 to 9 weeks' duration. He had been at Graefenberg 11 months. On his first arrival, the limbs were very infirm, the ankles swollen, and the feet and knees severely affected with chronic pains, giving him a dread of attempting walking exercise. He had previously been treated with various medicines, and with calomel very freely. He began with the use of from two to four *abreibungen* daily ; then two *lein-tuchs*, followed by the shallow bath ; afterwards by the plunging bath : next, the sweating in the blanket each other day, until crisis formed extensively on the legs, when it was discontinued ; and he had also a strong vesicular rash on the body, with a line of demarcation exact with the bandage.

He experienced immediate and very complete relief to the pains in the knees and ankles when the boils appeared. Afterwards, they formed also on the knees, arms, and shoulders. When the crisis subsided, he douched twice a day for eight minutes, instead of using the plunging-bath, as he thought it suited him better, and proved more favorable in producing good crises ; for the chronic pains had returned occasionally, but were invariably relieved by the formation of boils. When I saw him he was almost perfectly restored to health. He related that he had derived great strength to his ankles from the daily use of a cold foot-bath, deeper than usual ; that when he did use the blankets, he found the afternoon more favorable than the morning for the producing of perspiration ; and this, he thought, especially as he had a quick digestion. For those who might have a weak and slow digestion, he considered it, from observations he had made, an unfavorable time. This gentleman was so well recovered that he was about to leave Graefenberg.

Gout and Rheumatism.

A gentleman, aged 47, robust and plethoric, subject to regular gout, hereditary, for 10 years, the fits severe and very protracted, once had a rheumatic fever, and now often suffers from rheumatism, especially in the shoulders and the arms. He related that he had been regularly treated in his fits with mercurial purgatives and colchicum, with a sure control over the symptoms, but without lasting benefit; that the last fit, of two months' duration, had been left more to itself; and one knee had remained so much swollen, stiff, and painful, that locomotion was extremely difficult. The usual liniments and lotions being ineffectual, although in combination with the internal use of iodide of potassium, he had recourse to a part of the water-cure treatment, using wet bandage, covered by dry, constantly to the knee; and every morning, on first rising, a cold bath. This bold practice was so successful, that he soon recovered the power of walking. He had tried every kind of regimen as a preventive—meat without vegetables, and then a farinaceous diet without meat, total abstinence from wine and beer; and yet his prudence was not rewarded by success. Since he had drank water freely, he had not found any necessity, as far as his feelings dictated, of being at all mindful in his diet, so perfect was his digestion, doubtless rendered better by the acquired power, from the improvement in the limbs, of taking free exercise. There were chalkstone deposits in the fingers and elbows.

His treatment was as follows:—In the morning, early, sweating in the blanket, followed by plunging bath; a walk and free drinking of water; at 11 A. M. a douche for five

minutes, having begun with three ; on his return from the long walk to and from the douche, an abreibung, which much refreshed him ; at 5 P. M. 2 abreibungen, within half an hour of each other ; umschlags to all the affected parts. I left him making very favourable progress towards his cure. I should observe, that this patient was not desired to make use of the body bandage, as he had so regular and perfect a state of digestion.

Hereditary Gout.

A gentleman, aged 50, of middling bulk and stature, had hereditary gout first 20 years ago, brought on by violent efforts in swimming, to save himself from drowning, on a winter's day ; was for years subject to fits of great severity, and of 6 or 8 weeks' duration ; has chalkstones in various parts, particularly in the hands and feet ; disappointed by allopathic medicine, of which colchicum and mercury formed part, he tried homœopathic, with no other result than the longer staying away of the gout ; and this benefit he attributed to the care in diet. The fits were of equal severity when they did return. For some time he adhered to a diet of fish and vegetables, and for several years has wholly abstained from wine. Five years ago, went to Toplitz and Carlsbad, without benefit, and afterwards to Wiesbaden, going through a full course of treatment there, still without apparent advantage. He next proceeded to Franzens-bad, in Bohemia, and tried the mud baths for a month, sitting in the mud, up to his neck, at 97° Fahrenheit, for half an hour, each other day, with no other good result than curing his lumbago, which has never returned. He came to Graefenberg three years and nine months ago, in a state of such lameness and continued suffering, that he felt himself fast approaching to a

bed-ridden state. For the space of two years, with the interruption only of two months, he made daily use of the sweating blanket, with this frequency more by his own desire than the wish of Priessnitz, wishing to force crisis; but he is convinced that it was an error, and that he was weakened. In six weeks, he had boils on the insteps, which remarkably relieved the chronic pains; and, some time after, the urine deposited much substance, which appeared to him like wet chalk. In the beginning of the treatment, Priessnitz examined him, first at the half-bath, then after the plunging, and told him his complaint would be cured in time, and even encouraged him to expect the recovery of the hands; but I am persuaded there was too much disorganization of parts to admit of it. In some of the joints of the fingers there was ankylosis, and here and there absorption of cartilage. However, much of the chalkstone deposit had been removed by the treatment, and I doubt not he will obtain further improvement. After five months, he had an acute attack; which at first he left to itself, but afterwards used rubbings in the shallow tepid bath, with tepid affusions and umschlags; all with much advantage. He remained the whole winter, but considers that the "winter cure" did not suit him, the cold being often severe, from 4° to 10° Faht. for a continuance; but he says that the atmosphere was so clear and still, with often a full sun, that the cold was agreeable to those who could take very active exercise. When restored from the fit, he resumed treatment. His skin was with difficulty excited to perspiration; and Priessnitz had desired him to use two douches a-day, and even advised three occasionally; but he continued with two, sometimes using a plunging bath also, and always, twice a week, after the sweating in the blanket.

He quitted Graefenberg for a time, and returned. He has used umschlags always, and drunk 10 or 12 half-pints of water daily. He related to me that the gout now very rarely and very slightly affects him, and that he can walk ten miles with more ease than one formerly. He looked well. He had not touched medicine since he had been under the water-cure treatment, which he extols in the highest terms.

Cutaneous Eruptions and Universal Pains.

A gentleman, aged 49, robust and rather corpulent, after syphilis five years ago, had a fever in Italy, for which he was bled so freely that his strength was exceedingly reduced. He kept his bed three months ; was bled from the arm 15 times, and had leeches, also, very freely applied to different parts. On recovering sufficient strength, he went to Graefenberg, then having universal pains of a doubtful character, with much cutaneous eruption ; sweated in the blanket every morning for four months ; and, instead of being weakened, gained strength regularly ; always the plunging bath after it. At that time the lein-tuch was seldom used, except in fevers. He douched also occasionally, and drank from 12 to 15 glasses of water daily. He recovered perfectly, and remained well three years. By many acts of imprudence he lost his health again ; had an inflammatory attack on the chest, for which he was freely bled, and with relief at the moment ; but other evils followed—lumbago and sciatica, of the most painful description. Leeches and blisters were applied to the hip repeatedly, without relief. He consulted the most eminent physicians in Germany ; and, by their advice, used leeches, blisters, and mercurial frictions ; in opposition

to which the sciatica increased. He went to a water establishment in his neighbourhood, his convenience not permitting him to travel to Graefenberg. He used, first, a plunging bath, then the vapor bath for one hour, and next the plunging bath again; but this treatment much disagreed, causing particularly oppression of the chest. The sciatic pain still increased, and at length became so intolerable, that the actual cautery was extensively applied to the hip, of which I saw the evidence. He took mercurial purgatives frequently.

By these means the violence of the disorder was broken; but he got cold, and had inflammation of the larynx. After much interval, it was with great difficulty he could accomplish the journey to Graefenberg, where his anxious thoughts were directed. At length, he again presented himself to Priessnitz; then having severe sciatica; pain also of the femoral nerve; indigestion; hæmorrhoidal suffering; hypochondriasm, and general debility. At first, the treatment consisted of lein-tuch, shallow tepid baths, sitz-baths; and wet bandages, covered by dry, to the affected parts. Afterwards, he sweated in the blanket, and used the plunging bath, not finding any disagreement, as he had done with the vapor bath, &c. After three or four months, had general crises, but no boils in the affected limb till eight months had elapsed, when also the thigh was covered with a scaly rash. The pains were entirely relieved when the last boils had suppurated freely. He next used the douche very regularly; and, when I saw him, did so for eight minutes every day. The limb had recovered its size and power; he could walk almost any distance without inconvenience.

He remarked that, till within the last few weeks, the bad limb had never perspired when the other parts of the body freely yielded to the influence of the blanket process.

This was a very important case, and one that did infinite credit to Priessnitz and the water-cure means. It shews also the necessity of their being used with judgment ; for, till he came to Graefenberg, he had been injured rather than assisted.

Great Nervousness.

A military man, aged 32, had used mercury for a long time, which created great nervousness eventually ; and, in a state of much debility, with wandering pains, he went to Graefenberg. He began with two lein-tuchs, a shallow tepid bath, and sitz-bath. Soon after, a plunging bath was added every other day. But his zeal led him into error ; he would go far beyond his instructions in every thing. One morning, he drank eight large glasses of water, instead of the four prescribed, before breakfast ; and, omitting the necessary walking exercise, went into the billiard-room. The kidneys had not actively secreted. His feet became cold, and he was altogether uneasy. He went out for a walk, accompanied by a friend. He soon fell into incoherent conversation, and was got home with some difficulty. He did not quite lose consciousness, but was speechless ; made signs for pen and ink, but could not write. He had violent head-ache. Priessnitz directed a tepid (62°) foot-bath, with free rubbing ; sprinkled water on the face and head ; and shortly after were applied three abreibungs in the course of half an hour ; and wet bandages to the head : he was put to bed. Intense pain of the head ensued, with

some general fever and extreme feebleness of the limbs. Priessnitz, at his next visit, a few hours after, ordered two abreibungen, with an interval of ten minutes ; then a foot-bath for an hour, the water being changed two or three times ; next, a lein-tuch for 20 minutes, followed by the shallow tepid bath, in which he was rubbed for half an hour by two attendants, with occasional affusions of cold water over the head. He now vomited freely, and this gave relief. The whole treatment was so successful, that, in another hour, he recovered sense and speech, and lost the pain of the head. In a few days, general treatment was resumed, and continued with great regularity. He was now always careful to take free exercise before and after every process. Numerous boils formed chiefly in the upper part of the back, but also in the thighs, and they suppurated favorably. He was called away suddenly by military duty, but pursued treatment at home to a certain extent : and a letter from him to Priessnitz, a short time ago, announced the complete recovery of his health.

Urinary Fistula, or Opening.

A gentleman, aged 18, slight and rather delicate, received a severe contusion in the perinæum and neighboring parts by a fall from a horse ; to which was attributed the formation of a fistula, and one of a complicated nature, attended with much ulceration and very severe pain and inconvenience. The surgeons wished to operate, but his father determined on taking him to Graefenberg. Priessnitz directed an abreibung twice a day, and umschlags to the affected parts. In the progressive treatment were used lein-tuchs, plunging-bath, and douche ; and, at the end of a

month, he obtained a perfect cure. The healing was complete.

This case cannot fail to interest the surgical reader. The symptoms had been of an urgent character ; the bladder and rectum being affected with very painful irritation ; and, at the commencement of the water-cure, the ulcerated parts appeared in a very unhealthy condition.

Hemiplegia, or Paralysis of one Side.

A gentleman, aged 60, had suffered many years from dyspepsia and general debility of the nervous system, with often universal pains, which were called both rheumatic and nervous. He was seized with hemiplegia ; the right side affected. He got better for a short time, but had a severe relapse : was sent, after a time, to Toeplitz and Marienbad, but became worse. The mind and body were equally prostrate ; the digestion was languid ; the bowels wholly inactive without medicine or lavement. In April, 1842, he went to Graefenberg, in opposition to the advice of his physicians. Priessnitz prescribed, at first, two abreibungen in the day, and a head-bath for 15 minutes ; and, as he became stronger, two lein-tuchs, omitting one abreibung, together with the shallow tepid bath. At the end of three months, boils formed in the head, arm, and leg, only on the affected side, from which evidently great benefit resulted. Neither plunging bath nor douche were used in this case. He received his health entirely at the end of seven months ; nervous energy was restored ; he had the power to climb the hills, to write his letters, and again enjoy his spirits in society.

Catalepsy, or Trance, General Debility, Indigestion, &c.

A Russian nobleman, aged 36, had reduced the vigor of his constitution by dissipation ; and, on a severely cold day, at St. Petersburg, 10° below zero, paid a visit of ceremony, insufficiently clothed. He had scarcely entered the room, when he was seized with catalepsy, and appeared like a statue ! The ladies who were present were at first amused, thinking that he was acting ! but soon they took the alarm. He could not speak ; but, retaining his senses, made signs that he wanted water. He was affused all over from buckets, soon drank freely, and in less than an hour recovered his power of moving. But from this day he became an invalid, suffering especially from pain and nervousness of the the head, with general debility and depression of spirits, also having severe indigestion. He was under medical treatment for two years, and visited Carlsbad, Toeplitz, and other baths in Bohemia, without any marked benefit ; then went to a water establishment near St. Petersburg. He used the vapor bath, as being considered preferable to the blanket, and after it the plunging bath for five minutes, followed by cold water lavement, all without taking exercise to produce reaction. The treatment was repeated, but so much disagreed that he soon left the establishment. He consulted an eminent physician, who advised another water-cure establishment ; but that he should first go to Kissingen for a few weeks, to improve the state of the digestive organs. He followed this advice. He thought himself rather injured than benefitted by Kissingen. In the second trial of the water-cure, the shower-bath in a continuous mass was applied to the head for some minutes, eight days

in succession ; he also used the plunging bath. His expression was that he thought he should have gone mad ; and, in despair, he quitted for Graefenberg. Priessnitz gave him every encouragement, but thought mild treatment necessary at first :—for two days one abreibung and one sitz-bath, then two of each ; and in this manner for ten days, when he became stronger. He proceeded gradually to the use of active treatment, but never to the fullest extent : the douche, once a day, was the strongest part of it. In half-a-year, he perfectly recovered, and was again in possession of his spirits and the use of his faculties, which had become impaired by the disorder of his nerves. He said he owed his cure to the superior method of treatment pursued at Graefenberg, and to the fine mountain air.

Seminal Weakness, with Great Nervous Debility.

A superintendent of mines, aged 24, had found his nervous system much deranged by the unwholesome atmosphere in which he lived ; and at length experienced an involuntary discharge of prostatic liquor, and occasionally of seminal secretion from slight exertion, attended with pain in the spine and loins, occasionally severe. He was in a miserable state of nervous suffering, and went to Graefenberg. For a considerable time he could bear only very mild treatment ; yet, after four months, the discharges ceased. The pain remained, and also his feebleness. He douched and received the water particularly on the spine and loins. Boils and “dartres” formed near the seat of pain, and immediately gave the greatest relief. His recovery was complete in 11 months. It is unquestionable that the crisis in

this case was highly advantageous. The boils suppurated favorably ; and the pain, which had been of long duration, gradually passed away, and has never returned.

Debility, Nervousness, and Baldness, following the Use of Mercury.

A gentleman, aged 33, having used mercury with great freedom, and been careless in exposing himself in unfavorable weather, fell into a state of great debility and nervousness, and gradually became almost bald. He went to Graefenberg in this state, and was described to look more like a corpse than a living person. His first treatment was a sitz-bath, two lein-tuchs, followed by a shallow tepid bath and free drinking of water. Afterwards, he sweated in the blanket, and used the plunging bath every other day ; douching also on most days, but omitting one lein-tuch, and not using any on the day of the blanket. He drank water freely, and took as much exercise on the mountains as his strength would allow. Soon after his arrival, the few hairs on the head which he brought with him disappeared, and the baldness was complete. Boils formed particularly at the nates, and suppurated freely ; when the treatment was reduced to the use of two lein-tuchs and a sitz-bath. Soon after, an eruption appeared over the whole body ; first vesicular, and afterwards scaly ; also more boils. The linen was stained with appearances which were supposed to arise from mercury. At the end of six months, he gained some color of the cheeks, and became stronger ; but also new shoots of hair appeared on the head, and which in two months more so increased, that when I saw him, two months later,

he had a fine head of hair ! He was pursuing regular treatment, and evidently was quite in a fair way of recovery.

Does Water bring Mercury from the System ?

During my stay at Graefenberg, I heard frequent mention of the stains of mercury and of iodine appearing in the lein-tuchs, either of blue or reddish color ; but Priessnitz assured my friend, Dr. Buxton, that he had seen mercurial globules issue at the ends of the fingers after a continued course of the water-cure, in patients who had made a great employment of mercury either internally or externally, or both, notwithstanding that they had desisted from all use of the medicine for even several years ! This appears almost incredible. I cannot doubt the veracity of Priessnitz ; and Liebig, with whom I discussed the subject, had no doubt of such a fact, and offered this explanation : that mercury combines with animal matter, and may remain so combined for an indefinite time ; and that the quick change of matter which belongs to the water-cure treatment would tend to the separation of the mercury, which might appear in a globular or other form.

I have witnessed examples of the latent stay of mercury in the system, and shall cite the following : I prescribed to a poor woman, afflicted with rheumatism of the wrist joint, threatening ankylosis, a mercurial ointment, which she rubbed in with only occasional intervals from January to the end of May. No mercury was taken internally ; none used externally after May. In November following, she was seized with the most violent salivation that can be imagined.

Defective Hearing and Smelling, with General Debility.

A gentleman, aged 24, of healthy appearance, when 12 years old, had a nervous fever, which exceedingly weakened his constitution and rendered him very deaf; from that period, he had been weak and sickly, and unequal to much exertion. When he arrived at Graefenberg, four months and a half ago, such was his state, with a bad appetite and almost a loss of smell. His hearing always very defective. Began treatment very gently with abreibung, lein-tuch, and sitz-bath; to drink water very freely and take abundant exercise. After a fortnight, his appetite and strength were improved; and treatment was increased to the use of the sweating blanket, followed by plunging bath twice a week. The douche on the other days; head-bath twice a day; and to sniff water freely several times in the day.

There ensued a critical diarrhœa several times, after which the hearing improved. When this diarrhœa occurs, boils seldom happen also. The sniffing of water was at first disagreeable; but finding advantage from it, he persevered; and when I last saw him, his hearing and smell were both recovered. He was strong, active, and in good spirits.

High Fever, with Delirium.

A young man, aged 21, on his way to Graefenberg, for the treatment of a rheumatic complaint, found himself unwell at Vienna, but travelled on, and, when he reached his destination, was in a high fever, with delirium. Until this was reduced, an abreibung was kept applied in the quickest succession; so immediately hot did the wet linen become. The delirium quickly subsided. When the fever was much

abated, he was put into the lein-tuch, and this was followed by the shallow bath. Very soon a copious small-pox eruption appeared. Lein-tuchs were continued, according to the state of the skin. There was no return of fever ; the appetite was natural. In ten days, he was able to walk out of doors. He had been vaccinated in his infancy ; but, notwithstanding, the pustules were universal and of full size. No pitting ensued.

It is unquestionable that the water-cure treatment, applied at the beginning especially, is admirably adapted to the cure of eruptive fevers ; small-pox, measles, and scarlatina.

Dyspepsia, Sleeplessness, and Nervousness.

An Austrian officer, aged 60, had been very stout and remarkable for the goodness of his appetite ; but by degrees he became dyspeptic, very nervous, and, above all, lost his sleep more and more by degrees, till at length he was not able to procure more than one hour of dosing in the twenty-four, for upwards of two years. He had no regular sleep whatever : opiates would not succeed, and he was in a most wretched state when he went to Graefenberg. Three months passed away without any decided improvement. It was in the beginning of spring ; the weather very cold, and he was not strong enough to take much exercise. Hence a slower improvement. Treatment : in the first of the morning a lein-tuch followed by a shallow tepid bath ; an abreibung twice a-day ; usually a second lein-tuch, followed either by an abreibung or shallow bath. By degrees he improved, gained some appetite, and sleep returned, at first for an hour only ; then more and more, till, by the mid-

dle of summer, he could sleep comfortably for seven hours ; and he quitted Graefenberg recovered from every inconvenience.

Rheumatic Neuralgia.

A gentleman, aged fifty, of the nervous temperament, yet appearing to have good muscular power, had lived many years in the West Indies, and become enfeebled in constitution by dyspepsia and complaint of the liver. On returning to England he contracted rheumatic neuralgia, which principally affected the thighs and legs. They were morbidly sensitive both to heat and cold, not being able to bear the heat of the fire even at some distance ; and instant severe pains occurred in going into the cold air. The skin would not endure flannel. He wore wash-leather. His whole nervous system was so deranged that he could not bear the least mental application ; not even to write a letter. At successive periods he went to the two Wildbads in Germany, last to that in Gastein, and from both received benefit. The strong douche was used, and which acted so powerfully on him that he could not continue it. On his return home, he caught cold, and had a severe return of the pains. He was advised to go to Bath, and to use the baths of so high a temperature as 106° ! Instantly he found his head congested as if filled with blood, had singing of the ears, and a general distress. He left the bath quickly ; afterwards bathed at 102° to 100°, a few times, but thought himself much injured. On a subsequent occasion, he went to Buxton, and was much benefitted. He was highly satisfied both with the baths and douche.

The water-cure treatment, however, attracted his notice,

and he went to Graefenberg about a year ago. He has pursued very regular treatment, has had several crises, and is materially benefitted, but still has some returns of neuralgia. He bears the douche and the plunging bath, and certainly is greatly improved in nervous energy ; and is by no means so sensitive to heat and cold. For example, he bore the Graefenberg winter, and could, when I saw him, take exercise in the sun. Priessnitz expected his cure to be completed in three or four months.

Gout.

An Austrian field-marshal, eighty-two years of age, had been a gouty martyr through a long life, and visited Graefenberg four years ago, when in such a state of infirmity that he could scarcely put his feet to the ground. Mild treatment was used, but it proved sufficient to produce boils, which formed near the affected joints. He gradually improved, and finally threw away his sticks, walking and riding on horseback with almost the activity of former years.

An old Polish general, nearly eighty years of age, also received equal benefit from the treatment of his gouty sufferings and infirmity.

Menorrhagia, or Excessive and Debilitating Menstruation.

A lady, aged forty-three, of full habit, for a long time subject to menorrhagia to such an extent as to make her feel enfeebled, had much shortness of breath on exertion ; with indigestion and disturbance of the head. A year ago had paralytic distortion of the face : this did not last. Had been upwards of four months at Graefenberg. Treat-

ment : lein-tuch in the morning early, followed by the shallow tepid bath. A sitz-bath, at first tepid, afterwards cold, twice a day, for twenty minutes, but not during the catamenia. At that period, the wet bandage around the body was to be changed every half hour ; but at other times, only when it should become dry. Such, with moderate drinking of water, was the principal treatment. Crises (boils) formed on the legs ; and the discharge from them was considerable and continued. She obtained a favorable recovery, and the periods became satisfactorily regular. When I quitted Graefenberg, she could ascend hills without difficulty, and was attentive to take regular exercise.

*Great Debility and Depression of Spirits, following
Nervous Fever.*

A young lady, aged nineteen, having been strong and healthy, was reduced to a state of great debility by a severe nervous fever, and became the subject of intense headache, attended with great depression of spirits. She went to Graefenberg in October. First treatment : a lein-tuch twice a day, one sitz-bath, and one head-bath. Soon after, from exposure to damp evening air, she had a short feverish attack, for which eight abreibungen were applied on the first day ; followed by a lein-tuch. In less than thirty hours the fever was quite removed. Ere long, crises (boils) formed in different parts, and from that time she scarcely experienced any head-ache. She drank water freely, and had umschlags, but never had stronger means used than I have mentioned ; and she perfectly regained her health and strength. When she arrived, she appeared, as I learnt, pale and very weak. On quitting, after five months' so-

journal, she had a nice color, and was cheerful, strong, and active.

Insensibility, following an Improper Bath.

A gentleman, aged twenty-three, not appearing delicate, of middling bulk, was undergoing treatment for deafness. After very slight preliminary means, he used the sweating blanket in the morning early. He was desired to go into the shallow tepid bath, before entering the cold bath ; but he was disobedient, and at once plunged into the latter, on a severely cold day, when the temperature of the water was little more than 40° Fahr. On quitting the bath, he fell down insensible. Priessnitz was called to him, who directed the most free rubbing of the lower extremities with cold water, and then the shallow tepid bath, with abundant and universal friction, together with moderate tepid affusion over the head. He was quite restored in about an hour. This example shews how careful the patient should be to obey instructions, and not attempt to judge for himself when using the active processes of the water-cure treatment.

Insensibility, following Over-Drinking.

A lady, aged thirty-two, disposed to corpulency and having a short neck, drank, on first rising, four pints or more of water, in a short space of time, taking only a slow walk in the garden. She was suddenly seized with an universal feeling of coldness over the chest and in the extremities, very quickly followed by insensibility. Her state appeared very alarming. Similar treatment to that mentioned in the last case was adopted, and with eventual success ; but

she was not quite restored till the expiration of twenty-four hours, and for a long time after, she was reminded of the shock from which she had suffered. This case is sufficient to point out the infinite importance of taking active exercise when much water is drunk. Here, the kidneys had not acted. There was a temporary plethora of the vessels; and some effect must be attributed to the influence of the cold water as a sedative to the nerves of the stomach and first intestines.

Secondary Syphilis—(A horrible Case.)

A gentleman, aged 34, was attacked, in the year 1828, with secondary syphilitic symptoms, having had primary disease seven months before, and which, he said, was very badly treated. He exposed himself carelessly during the use of mercury. Afterwards measures were used with apparent success, for he got and remained pretty well for several years. At length, no fresh cause having existed, a swelling appeared on the forehead, painful, persisting, and resisting all treatment. He went in the summer of 1837 to Aix-la-Chapelle, and used the baths with only slight advantage. An abscess formed in the forehead, and was opened. No healing process afterwards. He continually grew worse. Twenty months ago he went to Graefenberg; then having three foul ulcers, deep, and each the size of a sixpence, attended with deep-seated pains, and often prickings near the surface. He had also a painful node on the shin of the left leg. His constitution was much weakened, and I was told that his appearance then was alarming, from the signs of exhaustion and distress. He was without appetite, and procured but little sleep.

Priessnitz ordered a lein-tuch, followed by a shallow

In this instance the treatment was out of proportion to the occasion. I suppose that Priessnitz apprehended internal inflammation. I take the liberty of thinking that it was an error in diagnosis; the knowledge of which is always so important in the administration of any kind of treatment. I saw this gentleman immediately after his recovery, and received from him a very minute account.

Debility, Sleeplessness, Depression of Spirits, &c., from excessive mental application.

A lady, aged 30, brought on a state of extreme nervous debility, with impaired digestion, headache and confusion, with loss of sleep, depression of spirits, and many other nervous symptoms, by a course of severe literary application. She had the highest medical advice in London; but, although relieved in her most troublesome symptoms, she continued in a state of such great debility, that she could not walk across the room without assistance. She tried change of air and scene without success; and, as a last resource, went to a water establishment in England. An abreibung twice a day, and a sitz-bath once, with body bandage, and free drinking of water, constituted her treatment. In three weeks, her amendment was such as to enable her to walk out of doors; and after a few months, she was strong enough to travel. She felt convinced that her nervous debility required further and most skilful treatment. She arrived at Graefenberg shortly before I quitted; and she was in good spirits, with the prospect of her perfect recovery.

Scrofulous Disease of the Knee Joint.

Miss —, aged five years, a child of nervous tempera-

ment, first suffered, four years ago, from a painful inflammation of one knee, appearing otherwise in good health. Leeches and evaporating lotions were applied freely ; and afterwards repeated blisters. At a later period, malt and hop baths at 88° Fahr. for one hour at a time, two or three times in a week, in alternation with warm salt water. She had been at Graefenberg about fifteen months. When she first arrived, she could not put the foot to the ground, and used crutches with difficulty. The knee was painful in stormy weather. I examined the joint, which was evidently diseased from scrofula. There was still enlargement ; but I was told by the nurse it was very much reduced in size ; and this indeed was manifest from the loose state of the skin. It was almost free from tenderness. There was some motion in the joint. She could walk very nimbly without a stick or any assistance ; first moving on the heel, then on the toe. The limb was shortened and the tendons of the hams were contracted ; but the improvement was very satisfactory. She had been delicate and weak. She was become strong and healthy. The case is so important that I shall particularise the treatment.

At six A. M. the lein-tuch for an hour, followed by a shallow-bath at 64° for five minutes ; wet bandages to the waist and around the knee covered as usual : to go out before breakfast, and drink three small glasses of water. At nine, the knee was rubbed for five minutes with the wet hand, and wet applications were again put on. At 11, repeated, and a sitz-bath for 10 minutes. At one P. M., the local treatment and waist bandage. At half-past two, same treatment. At four P. M. sitz-bath for 10 minutes ; temperature at a later period reduced to 60° ; the knee again

rubbed with cold water, and a bandage re-applied. At five p. m. lein-tuch and shallow bath, which also was reduced in temperature by degrees to 60°. Local treatment repeated. Since last June she had douching at 11, and omitted the sitz-bath ; but when the weather proved unfavorable, this treatment was reversed.

Scrofulous Enlargement of the Knee Joint.

A little boy, aged five years, of calm disposition, when two years old had a fall, by which the knee was injured. This, like the last, was a scrofulous enlargement of the knee-joint. He was just arrived at Graefenberg. The leg was drawn up two inches from the ground. Priessnitz observed that the tendons were so contracted and rigid, that a division of them by the surgeon would become necessary, but he would treat the enlargement of the joint. The treatment directed was, a lein-tuch for half an hour three times a day, followed by shallow tepid bath with local application of water, and the drinking of water, as in the last case.

Having related, I believe, a sufficient number of cases to display the powers of the water-cure treatment, I shall only add to their number by alluding, in a cursory manner, to a few other examples, the details of which would require more space than I can afford on the present occasion.

I witnessed two cases of incipient inflammation of the lungs, with much inflammatory affection of the throat, and of the mucous membrane of the trachea, promptly and successfully treated by abreibungs, lein-tuchs, tepid shallow baths, and umschlags.

In a case of hæmoptysis, it was evident to me that the

free drinking of the water had proved injurious ; although in other respects the general treatment had been very useful. I am convinced that in this disorder the patient should be even painfully restricted in the quantity of drink. I should prescribe iced water, in very small quantities at a time, as almost the only beverage ; and the same principle of management I should observe, in any case of arterial hæmorrhage.

I witnessed many urgent cases of disease of the skin, various in their nature. They were chiefly impetiginous or herpetic. *Dartres* is the common name assigned by the foreign patients to most of the eruptions.

One of the worst examples of lepra that I ever saw, presented itself to me in the case of a gentleman, 23 years of age. It was universal from head to foot. He had been at Graefenberg one year ; and for a long time had been on full treatment, using the douche every day, and sweating in the blanket three times a week, with other processes. He considered himself to be very materially improved : the patches were much less scaly than formerly ; and in various parts the skin had assumed a healthy cicatrized appearance. Priessnitz told him that in these cases the water treatment prospered most during the spring. He expected to be successful in the cure. There is no description of cutaneous malady in which, according to my experience, it is so difficult to be effected. This patient had formerly taken various mercurial and other alteratives ; had been at Carlsbad ; at Gastein in Tyrol ; and at Kreuzenach, a celebrated place for diseases of the skin.

I believe that the water treatment is more adapted than any other to the relief or cure of obstinate diseases of the

skin. The continued frictions, ablutions, perspiring processes, douches, &c. must have a powerful influence in exciting an entirely new action of the vessels of the skin ; but in any case in which, after a fair trial, the water means did not seem competent to meet the evil, I should not hesitate to add the use of some mild alternative. I saw many cases of scrofula, some of which were materially benefitted. In others, it was doubtful whether any improvement had been effected.

In the melancholy diseases of tetanus and hydrophobia, I should consider the employment of the most active of the water-cure processes well deserving a trial. Priessnitz assured me that he had cured a dog of hydrophobia by incessant douching with the coldest water. Many years ago, one of my horses was seized with locked jaw, and the poor animal appeared to be fast approaching to a hopeless condition, the farrier having exerted all his skill in vain. The late Professor Coleman by chance arrived at the time, and advised repeated affusions of the spine with the coldest water from buckets. After about an hour, according to my recollection, the spasms of the jaw, and of the several affected muscles, became relieved. A complete recovery ensued. I have thought it not unbecoming to relate these comparative cases.



CHAPTER III.

HYDROPATHY—ITS HISTORY, &c.

THE word *Hydropathy*, as used to denote the Water-Cure, has been objected to, as not being etymologically correct in signification. It is derived from two Greek words, together meaning, *water-disease*. It is, however, a term well understood. *Hydrotherapeutics*,—which means, *healing with water*,—has been substituted, and is decidedly a better term, as far as etymological correctness is concerned. *Hydriatics* has also been used. The best term is the plain English one, the *Water Cure*. But whichever term is used, it is not less correct than many others in common use among the best speakers and writers.

That parts of the Water Cure have, to some extent, been practised in the healing art, no one will pretend to deny. As a general thing, water was used to a greater extent, as a remedy, in the earlier periods of the history of medicine, than in later times.

Hippocrates, the father of medicine, determined that, in certain kinds of baths, warm water would produce a chill, while cold water would produce a contrary effect. We are also told, that to produce diaphoresis, or sweating, he did not resort to the use of internal remedies, but merely poured warm water over the head and body, and then heaped clothes upon the patient, which would produce the desired effect, without the irritation of the internal organs, consequent upon

the administration of powerful diaphoretics. This, as will be seen hereafter, somewhat resembled the sweating process of the water-cure. He also recommended the use of water in various ways, and in the most serious diseases. Celsus and Galen also recommended the use of water, both in sickness and health ; and many similar examples might be quoted.

The honor of making certain various discoveries, in the application of water to the human body as a remedial agent, is due Vincent Priessnitz, a peasant and native of a small colony called Graefenberg, situated two miles from the town of Freiwaldau, and about half way up one of the mountains of the Sudates in Austrian Silesia, Germany. This has always been his place of residence, and was also that of his father before him.

His discoveries were at first the result of accident. He was, in the common acceptance of the term "unlearned," having at most only a very limited education, but possessed naturally a strong and observing mind.

He tells us it was in the year 1816, when he crushed one of his fingers, and, as it were, by instinct plunged the injured part into water until it ceased bleeding. He felt the coolness agreeable to the benumbed part, and found that by repeatedly holding it in water, without the least inflammation or suppuration, after secreting only a little white mucous matter, it healed in a very short time. Then he was told, as he says, by some old men of the neighborhood, that they could relate many instances where cold water had been used in similar cases, and had always proved salutary above every other remedy. In the year 1819, he met with the misfortune to break the ribs upon one side, by a loaded wag-

gon. The physician, called from the nearest town, declared the injury incurable thus far: that there would be lumps formed, which, on the least exertion, would cause pain, and thus continue through life. He prescribed some herbs, a decoction of which, in wine, was to be laid upon the injured parts. These fomentations gave him so much pain that he was obliged to tear them off. Recollecting his cured finger, he commenced using swathings of cold water, and thus obtained immediate relief. Then, to press out his ribs to their natural position, he stretched himself, with the abdomen over the edge of a chair, thus leaving the upper part of the body free; and then, by repeatedly holding in the breath, he was able to extend the ribs towards the natural position. He persevered in this way, and with the wet sheets, and in a few days, without having any wound fever, he was able to walk, and finally effected a perfect cure.

Having thus gained a little experience, he afterwards, from time to time, found opportunity for performing cures among his neighbors, and kinsfolks, until he had finally adopted all the various forms of applying water to the human body, and which has enabled him to practise the healing art with greater success than any other individual that has ever lived in any age.

Gaining thus at first a kind of celebrity among his immediate neighbors, it gradually spread until his house began to be frequented by considerable numbers of sick persons from adjoining parts. And although his cures were often of the most astonishing kind, and generally performed gratuitously, there were not wanting those who were anxious to put an end to the "mischief," as it was called. The laws of the country are particularly severe upon quackery of every form;

and no one is allowed to sell medicines of any kind except those who are regularly certificated for that purpose.

One physician alleged that the sponges used by Priessnitz contained some remedial property, which, if true, would have placed him under the jurisdiction of the law. His sponges were accordingly dissected and examined, and of course nothing found.

Another prosecuted him for quackery, pretending that he, and not Priessnitz, had cured a certain miller of the gout. Accordingly both the physician and Priessnitz, together with the miller, were summoned before the court. The miller, in answer to the question, who had relieved him, answered, "both—the doctor of my money and Priessnitz of my gout." And thus Priessnitz was acquitted from this charge. His government afterwards sent a commission of medical inquiry to Graefenberg, and finding that there was no quackery about the establishment, that the only agent used was pure water, with attention to air, exercise and diet, and that his practice was not only entirely safe, but highly beneficial, he was, on their favorable report, allowed to continue his operations.

He has thus continued to go on, using only the simple agent, pure water, for the treatment of all curable diseases, and the relief of those that are incurable. Persons of all ranks, grades, and professions, have placed themselves under his charge ; a large proportion being such as had failed by every attempt to get relief in any other way. At present, says Captain Claridge, (1841,) there are under his treatment an archduchess, ten princes and princesses, at least one hundred counts and barons, military men of all grades, se-

veral medical men, professors, advocates, &c.,—in all about five hundred.

At first his numbers were comparatively small. In 1829 the number was only 45. In 1840, it was 1576. Between 1832 and 1842, he had treated in all 7500 patients, and of this number Captain Claridge informs us he lost but 36. This will appear remarkable, when it is remembered how large a proportion of the whole number go there only as a last resort, and whose diseases had withstood every other kind of treatment, and, in many instances, for a great length of time. Since 1840, his numbers have been a little lessened, by the numerous similar establishments that have been formed in different parts. Austria and Prussia have afforded him the largest number.

The water-cure has now stood the test of more than twenty years' experience. Some ten years ago the establishment of Priessnitz was the only one of the kind in existence. Since that time they have increased in all to about one hundred. They are scattered all over Germany. Austria, Prussia, Russia, and Belgium, all have their water-cure establishments. The government of France, like that of Austria, sent an efficient medical officer to the Graefenberg establishment to inquire into its merits, and accordingly they are rapidly multiplying there; and, latterly, England is following the example of her continental neighbors.

Of the correctness of the reports respecting the cures at the Graefenberg establishment, and of the great power of water, there can be no sort of question whatever.

Dr. Edward Johnson, for years a pupil of Sir Astley

Cooper, a practitioner of more than twenty years, in which time he has had occasion to write at different times as many as twenty thousand prescriptions in a single year, a man well known as an author as well as a practitioner, after remaining at Graefenberg during a whole winter, trying the various processes upon his own person, and after having abundant opportunity of witnessing the cures performed there, says, "Priessnitz in his practice has met with an amount of success perfectly unparalleled in the history of disease and its treatment." And he further says, "I am perfectly convinced that I can cure a greater number of diseases, and in a shorter time, by the hydropathic treatment, than I can by the exhibition of drugs ; and that there are many diseases which I can thus cure which are wholly incurable by any other known means."

Again : Dr. Johnson says, "There is no well-educated man in England, who dare, for his reputation's sake, refuse to admit that a remedy which can produce (at will) the most profuse perspiration, and which can also (at will) lower the temperature, and the velocity of the heart's action, to any given degree, even to the extinction of life—I say there is no well-educated man in England who dare deny that such a remedy *must* possess an immense power over diseases of every kind."

Sir Charles Scudamore, in his valuable work on Hydro-
pathy, says, "The *principles* of the water-cure treatment are founded in truth and nature, and rest, therefore, on an immutable basis. The *practice* may be occasionally abused, and then evil, instead of good, will result. If I could think that such a consequence was necessary, I would not for one moment be its advocate. But, convinced, as I am, that we

have in our power a new and most efficacious agent, for the alleviation of disease in various forms ; and in proper hands safe and effectual, I should be no friend to humanity nor to medical science, if I did not give my testimony in its recommendation."

The Rev. John Wesley, A. M., published a work in 1747, which went through thirty-four editions, called " Primitive Physic, or, An Easy and Natural Method of Curing Most Diseases." After deprecating the manner in which drugs were employed in the healing art, he proceeds to speak of the healing virtues of water ; and it would seem by the list of diseases given by him, as curable by the use of water, that his observations were strikingly correct as to its powers as a remedy.

Of medicines, he says, "The common method of compounding and decompounding medicines, can never be reconciled to common sense. Experience shows that one thing will cure most disorders, as well as twenty put together. Then why do you add the other nineteen? How often, by thus compounding medicines of opposite qualities, is the virtue of both utterly destroyed? Nay, how often do those joined together destroy life, which singly might have preserved it?"

This occasioned that caution of the great Boerhaave, against mixing things without evident necessity, and without full proof of the effect they will produce when joined together, as well as of that they produce when asunder ; seeing that several things which, separately taken, are safe and powerful medicines, when compounded, not only lose their former powers, but become a strong and deadly poison.

As to the merits of the discoveries of Priessnitz, there seems to be some difference of opinion, even among those who admit his great and unexampled success in the treatment of disease. Some would appear to inculcate that he is only wisely, ingeniously, and energetically carrying out principles and practices which have been understood and practised from the time of Hippocrates down.

On this point, Sir Charles Scudamore holds the following language :—“ I think that some writers on Hydropathy have not expressed sufficient praise and acknowledgment to Priessnitz, as the inventor of a treatment constituting a complete, systematic plan. To follow in a path, is always comparatively easy. It is quite true, that parts of the whole plan, and the principles, have been known and practised since the time of Hippocrates, and by none more ably and scientifically than the late Dr. Currie of Liverpool. But all that can be quoted from history, bears no comparison with the regular and systematic whole which Priessnitz has so happily constructed, and by which he has raised himself an imperishable fame.”

Of the abilities of Priessnitz, all are agreed, that for good judgment, clearness, and decision of character, he is peculiar. To the phrenologist, a few admeasurements of his head will be interesting. As given by R. Beamish, Esq., they are as follows :—

Circumference across brows,.....	22 inches.
Circumference across causality,	21 $\frac{1}{2}$ “
Lateral arch from root of nose to occiput,.....	13 $\frac{1}{2}$ “
Transverse arch, from ear to ear,	14 “
Anterior arch, from ear to ear,.....	12 “
Posterior,.....	11 $\frac{1}{2}$ “
Anterior lobe,.....	7 “
Height from root of nose to comparison,.....	3 “

No line divides the perceptions from the reflecting powers, marking rapidity in forming a judgment on what the perceptions take cognizance of. The middle line is well developed, viz : Individuality, Eventuality, and Comparison. The perceptions are large ; so also, Constructiveness and Acquisitiveness ; reflecting organs full. Of the sentiments, Firmness, Benevolence, and Hope, are large ; Conscientiousness is full, but Veneration only moderate. Self-esteem and Approbation are large, Concentration full, the domestic groupe moderate, Secretiveness very large, Destructiveness large, Combativeness and Caution moderate. The eyes are small, and are in constant motion ; the lips are frequently compressed. The temperament is highly nervous.

Priessnitz, notwithstanding his accumulation of wealth (upwards of £50,000), his astounding success, and the manner in which he is courted and respected by the first nobles of Germany, is said to retain the humility of his former station of life, that of a peasant.

“Some complain that he says too little,” says Captain Claridge ; “and some who go there merely to learn the treatment, complain that he never explains any thing to them.” “It must be evident,” he continues, “that a man who has the whole year round from 500 to 600 patients, besides the peasantry of the neighborhood that may require his aid, cannot have much breath to throw away. Let any person speak to him of his own, or of his family’s case, and they will find his reply that of a man of profound sense—a reply which he never wishes to retract, and for which he will give his reasons in the most unaffected manner possible. But in respect to the second complaint, it must be

avowed that he has no very great regard for medical men, because no one has suffered more from their vindictive feelings than himself ; besides, he has ever found it a work of supererogation to endeavor to dispossess them of their prejudices ; nor has he time or inclination to enter into disputes upon a mode of treatment which he knows, as directly emanating from nature, to be always true to herself."

As to theories respecting the action of water upon the system, it cannot be expected that Priessnitz would be able to give them in a very scientific form or mode of expression. He deals more in *facts* than in theories.

His assertions are short, comprehensive, and full of meaning. He says that the application of cold water cures diseases by *strengthening the general health and fortifying the system* ; and this is precisely in accordance with Liebig, when he says that the *abstraction of heat* cures diseases by *exalting and accelerating the transformation of tissues*. And again, when Priessnitz declares, as he does, that cold water has a tendency to bring "*bad stuff*" out of the system, it is in exact accordance with Liebig's declaration, that it promotes the union of certain matters with oxygen, by which they are *carried out of the system*, and which matters, if not so carried out, become causes of disease. And the same kind of reasoning on the nature of things has taught Priessnitz, as it has Liebig, and all other medical philosophers, that all diseases must be cured by the inherent energies of the living system itself. According to Dr. Gregory, "all remedies are merely to be employed with the view of placing the body under the most favorable circumstances for resisting diseases."

According to Scudamore, he has "one single theory of

disease, which serves for all persons and all disorders ; that, viz., of the humoral pathology, upon a general principle, not attempting any division of the humors, according to the ancient physicians, but contented to believe, that in every disease the blood is more or less charged with morbid matter ; and which nature is always ready to throw out of the system, if properly assisted in her efforts. He considers that the use of medicine of every kind is a false interference with nature, and tends to interfere with her efforts ; and that, on the other hand, if fortified and assisted by the agency of water, internally and externally, in conjunction with good air, abundant exercise, and the avoidance of hurtful stimulants, she will acknowledge the help given, and will, in a longer or shorter time, throw off disease ; usually rendering a proof of such salutary operation, by the production of some kind of crisis."

Respecting this doctrine, the Humoral Pathology, by which all diseases are attributed to a diseased state of the fluids of the body, it may be said physicians are beginning to admit that there is more of truth in it than has generally been admitted.

The simplicity of the remedy in the water-cure is a matter of objection by many, and may be the means of leading those into its practice who are in every way unqualified. The agent being one of great power for good or evil, it will in such hands be liable to the most disastrous consequences. Priessnitz never treats two patients precisely alike. This shows the necessity, not only of understanding all the various applications of water, but also of possessing a thorough knowledge of the human system, both in health and disease.

Priessnitz, by his doings, has proved to the world two

things : first, that the water-cure is the most natural and best system of treatment ; and second, that he is a man possessing a genius most remarkable. As an example of the power of the remedy, of his skill, and of the necessity of understanding well the treatment, take the following case from Captain Claridge :

A person who had recently lost his wife and two children, was attacked with brain fever. Priessnitz ordered him a tepid bath, in which he sat and was rubbed by two men, who were occasionally changed. The man became so deranged, that it was with difficulty that he could be kept in the bath. In ordinary cases, this disease succumbs to the treatment in two or three hours ; but the patient in this case became speechless at the end of this time.

Priessnitz, with that coolness which is so leading a feature in his character, said, " Keep on until he either talks much or goes to sleep." The latter the man at last did, but not until he had been in the bath for nine hours and a half, when he fell asleep from exhaustion at half past ten at night. He was then put to bed, and the next day the fever had left him, and, though weak, he was able to walk about. If, in this case, Priessnitz had become alarmed, after the first two or three hours, and had discontinued the mode of treatment, to try some other experiment, the consequence might have proved fatal.

CHAPTER IV.

Dr. Billing's Theory of Disease. By Dr. Ed. Johnson.

THE "First Principles of Medicine," by Dr. Billing, is a work too well known, and too universally esteemed, to need any enconium from me. For years no medical work has issued from the press, which was received by medical critics and the medical profession at large with such universal approbation as this of Dr. Billing. In every medical library it took its place at once, as a standard work, and remains so to the present hour. Though essentially theoretical, yet its theories are everywhere so completely supported by multiplied practical facts and illustrations, which its author's position as a senior physician to the London hospital enabled him to accumulate—and the amount of clinical information with which it abounds is so great, the simplicity of its style so felicitous, while the common sense plainness with which the questions are argued is so strong and convincing, that its hypotheses have almost the force of facts.

It will be observed how beautifully Liebig's theory of life, (as far as it regards morbid actions,) and Billing's theory of disease, reciprocally support *each other*—and *both*, the principles of the water-cure.

Dr. Billing's theory is, that "*all*" diseases are caused by impressions made on the nervous centres or their nerves, by which the nervous *influence*, (whatever it be,) is exhausted or morbidly diminished. That the capillary blood-vessels

which (in health) are always held in a state of *semi-contraction (tone)* by virtue of this nervous influence, shed upon them by the nerves, become *relaxed and weakened*—(Liebig's diminution of *vital resistance*)—having their *diameters enlarged*, whenever the exhausted nerves fail in supplying them with the quantity of nervous influence necessary to preserve their tone, or state of *semi-contraction upon their contents*. That the weakened, relaxed, and *enlarged* capillaries now admit a *larger* current of blood, whose motion through them becomes *slower*. That they are, in fact, in a state of congestion. And that altered function or functional disease is the result of this altered condition of the capillaries, and altered size and altered velocity of the stream of blood which they carry. When this congestion takes place in the veins, it constitutes simple congestion—when in the arteries, it is accompanied by *degeneration of the arterial coats*—and now takes the name of *inflammation*. This degeneration of the coats of the inflamed arteries is Liebig's *excessive* action of the destructive force of oxygen—the enlarged arteries *now* containing an *excessive* quantity of oxydised blood, while the *resistance* opposed to its influence is (as we have just seen) *diminished*. This degeneration does *not* take place in the veins, observes Dr. Billing. No—because the veins do *not* contain *oxydised* blood.

Man is almost *entirely composed* of capillary vessels. His body may be compared to a sack stuffed with hair, every hair being a tube, of a *determinate diameter*, (which particular diameter is necessary to the condition of health,) and carrying a stream of fluid, which stream must also be of a determinate size. And this bundle of capillary or hair-like tubes is everywhere permeated by nervous filaments or

threads, which shed upon them their electroid influence, whose office it is to *preserve their tone or necessary diameter*—upon the preservation of which their healthy functions depend. When any cause deprives them of a due supply of the electroid or nervous influence, by exhausting the nervous system or any part of it, the healthy diameter is lost, becoming *larger*, and they now admit *too large a current* of fluid, and the velocity of its fluxion is *retarded*, producing congestion.

When any cause, as the exhibition of stimulants, elicits from the nerves too great a quantity of nervous influence, *then also* the healthy diameter is lost, but in a contrary direction. The diameter now becomes *too small*—the vessels *contract* too much—and the size of the current of fluid is now too much diminished. This illustration will, I trust, enable the unprofessional reader clearly to understand Dr. Billing's beautiful theory of disease.

Inflammation, then, consists of weakened, relaxed, enlarged, arterial capillaries, admitting a too large current of blood, whose progress through them is also retarded, giving rise to congestion or engorgement, degeneration of their coats, and *consequent alteration of their secretions*.

"All the business," says Dr. Billing, "of constant support and renewal of parts, and supply of secretions, as the growth or repair of bone, muscle, membrane, and other structures, the formation of bile, saliva, mucous, and other secretions, is carried on by the extreme minute branches of the blood vessels; and whilst these preserve their proper size and tone, all goes on well; when their action is deranged, disease commences, often prefaced by pain, or other disorders of the nerves." "Some capillaries are too small

to admit many of the red particles (oxydised blood-globules) unless when they are *enlarged* by inflammation, as in the eye, which, when inflamed, changes from white to red ; besides that, even the red capillaries are so minute, that they are not visible individually to the naked eye, till *enlarged* by inflammation." "During health the capillary arteries go on with their work of nutrition and secretion, the muscles are fed, the mucous surfaces are lubricated just enough to prevent any sensation from the substances which pass along them, the serous surfaces are made sufficiently moist to slide upon each other without sensation, and the skin is kept soft by an insensible vapor. At this time there is another process going on also, which is the removal of superfluous matter by the absorbents : if it were not for these, there would be inconvenient accumulation of what is deposited by the arteries."

"The deposit or precipitation of solid matter by the arteries is not difficult to be understood ; and we can, by reference to *chemical action*, account for the removal also of solids ; for solids become fluid or gaseous, by what is called spontaneous decomposition," (Liebig calls it *transformation of tissues* by the chemical action of oxygen,) "and thus removable by absorbents."

"The action of the arteries also is *acknowledged* to be contraction, whether considered muscular or not ; but there is some difference of opinion as to the degree of action of the arteries in inflamed parts. It is very common to say, that in inflammation there is an increase of arterial action ; but a consideration of the phenomena, and of the nature of arterial action, will show that in INFLAMED PARTS the CAPILLARY ARTERIES ARE WEAKER in their action ; that there



is DIMINISHED ARTERIAL ACTION, for the action of arteries is *contraction*. Now the arteries in inflamed parts are *evidently larger* than before—less contracted—that is, acting less.”

“It is the opinion of some persons even at the present day, that the motion of the blood is accelerated in inflamed parts ; though the experiments of Parry and others prove the *contrary* to be the case, as *follows* from the capillary arteries being *enlarged* ; inasmuch as where fluid passes through a given space, the current beyond that will be slower in proportion to the wideness of the channel ; as in a wide part of a river, where the current becomes slower ; and the same may be observed by passing water, mixed with grains of amber, through a glass tube with a bulbous enlargement in the middle ; the current will slacken in the bulb, and resume its velocity beyond it.”

“The difference between congestion and inflammation is, that in congestion there is merely distension of the vessels ; in inflammation there is, in addition, alteration of tissue—actual deterioration, more or less of the structure of the capillaries. * * * * The fault commences in the tissue. As soon as a want of that harmony between the nerves and capillaries, which is necessary to organization, takes place, their fine tissue begins to compose,” (the action of oxygen becomes, according to Liebig, *greater* than the resistance of the vital force—the same sense expressed in different language,) “the particles which were held together by this inscrutable agency begin to be precipitated from one another, &c., &c.”

“When accidental mechanical injury, or other cause, changes the action of the capillaries, either by a direct im-

pression on themselves, or by primarily injuring their nerves, *the derangement of their action is the commencement of disease*—secretions become altered, checked, or profuse nutrition is either diminished so as to produce emaciation, or there is an excessive deposition—vapory exhalations are diminished to dryness, or increased to fluid—bony matter is deposited in wrong places—or albuminous, fatty, or other particles, so as to constitute tumors—the nerves of parts become morbidly sensible, so as to derange the functions of those parts—portions, on losing their vitality, undergo spontaneous decomposition, (destructive action of oxygen, either owing to an unwonted quantity of oxydised blood being carried to the part, or from the diminished resistance of the vital force,) and are removed by the absorbents.”

“Irritation, continued excitation of the nerves of a healthy part, as just shown, at last produces inflammation, by exhausting that nervous influence which gives the capillaries power; they thus become weakened, allow of overdistension, and the part is in the state of inflammation or congestion.” “Thus, in a part inflamed, there is diminution of organic action, (contraction,) in consequence of which the blood is admitted in excess. As long as the capillaries are supplied with nervous influence, as long as they possess perfect organic action (contraction) they *preserve a due size*; when they lose it, either from the influence not being supplied from the nervous system, or are robbed of it by heat, electricity, cantharides, or *any other cause*, they give way, and admit more blood than before.”

Having given this explanation of the nature of inflammation, (which is also maintained by many other very able

writers, as Professor Macartney, I think, and several others, and proved by the microscopic observations of German experimentalists,) he proceeds to show that fever and that class of diseases called neuroses, or nervous disorders, as chorea, hysteria, tetanus, epilepsy, &c.—all those diseases which are characterized by irritation or morbid sensibility—consist in inflammation, that is, a relaxed, enlarged, and congested condition of the capillary arteries of the nerves—in a word, inflammation of the nerves. Indeed, if Dr. Billing be right in his assertion, (and I see not how it can possibly be refuted,) that *all diseases have exhausted nervous influence* for their cause, then it follows that all diseases whatever must consist essentially in weakened, enlarged, and congested capillaries, since the relaxation of the capillaries must be the first effect which is produced by exhausting that influence which alone preserves to them their normal size or diameter.

Such being the *one* proximate cause or essential nature of *all* disease, the principle of cure is *one* also. Thus there is (properly) but *one* disease, and *one* cure.

The proximate cause is relaxation and enlargement of the capillaries—the indication of cure, therefore, is to *constringe the capillaries*, to cause them to *contract and resume* their healthy dimensions.

Dr. Billing having established this position by a multitude of illustrations and practical facts well known to medical men, together with illustrative cases of particular diseases, as rheumatism, palsy, dropsy, consumption, skin diseases, hysteria, nervous affections, locked jaw, gout, &c. &c., then proceeds to show that all medicines, numerous as they are, together with bleeding, produce their good effects on

disease *by* the power, and *in proportion* to the power, which they possess, directly or indirectly, of causing the *relaxed* capillaries to *contract and resume* their healthy dimensions.

He reduces all medicines whatever to no more than *four*—sedatives, tonics, narcotics, stimulants.

Sedatives, direct and indirect, amongst which are included purgatives, emetics, and bleeding, are such as “diminish the action of the heart and other organs by repressing the nervous influence,” thus lessening the velocity with which the capillaries are supplied with blood by the injecting force of the heart ; and such as, by *emptying* the capillaries, facilitate their contraction by removing or lessening the resistance offered to their contracting sides by the contained blood.

Tonics are such as, being circulated *in* the blood *through* the capillaries, have the direct effect of constringing them ; or causing them to contract upon their contents, and thus to force or *squeeze* the fluid onwards.

Stimulants are such as elicit from the nerves a temporary, forced, and more than ordinary quantity of nervous influence, causing a corresponding degree of capillary contraction. But the effect of these last remedies is but temporary, since all forced excitement of the nervous centres must ever be followed by a corresponding degree of exhaustion.

Narcotics are such as, by dulling the sensibility of the nervous system, procure sleep, and thus afford an opportunity to the inherent curative power, or *vis medicatrix naturæ*, to restore the tone, or normal degree of contraction, of the capillaries.

Thus, then, however numerous be the *forms or symptoms*



of disease, there is, *de facto*, but *one disease*. And, however numerous may be the means and appliances of the healing art, there is in fact but *one intention* to be fulfilled—the restoration of the capillaries to their normal dimensions by *constringing their coats*.

I was once asked by a physician, for whose talents I entertain the highest respect, how I reconciled with this theory *that disease* called worms in the bowels. But to this I replied, that a worm in the bowels, UNTIL IT HAS PRODUCED IRRITATION, is no more a disease than a fly on the hand, or a flea on the back—and when that irritation has been produced, then it is that IRRITATION which constitutes the disease, of which the worm was the REMOTE CAUSE, as a musquito is the remote cause of the inflammation which its bite produces—and we have already seen that irritation, (which Dr. Billing with much more propriety calls morbid sensibility,) consists in inflammation of the capillaries of the nerves. But no one would think of calling a musquito a *disease*!

It is the *inefficiency* of drugs which has multiplied their number. Two, or two thousand, are required, because there is *not one* which can be depended on. If *one* could be discovered which would always effectually produce the necessary degree of *capillary contraction*, then that *one* would be *sufficient*.

“In some cases of disease,” says Dr. Billing, “when the secretions of the skin and kidneys are deficient, we renew them by bleeding, digitalis, antimony, &c., which lower the force of the pulse, thereby *diminishing the distension of the capillaries*, in conformity with the above statement.

Medicines, such as mercury, iodine, &c., have an effect on the arteries themselves, directly or through the nerves,

so as to *make the inflamed capillaries CONTRACT* independently of the consideration of the vis à tergo (state of the heart's action) or quantity of circulating fluid.

"Inflammation is always the *same debility* of capillaries."

"We see that solutions of metallic salts, such as nitrate of silver, tartar emetic, acetate of lead, bichloride of mercury, &c., and some acrid vegetables, such as mezereon, &c., act on the capillaries as ASTRINGENTS."

"We know that substances applied to the primæ viæ, or skin, are absorbed and carried into the circulation, and we judge that in this way these metallic salts, oxydes, &c., are carried to the capillaries of diseased parts, and strengthen and cure.

"All organic action is contraction." All organic or animal strength, therefore, depends upon the power of the different parts of the body to contract. And, for the same reason, all animal weakness depends upon a loss, more or less, of the power of contraction. And again, for the same reason, all remedies which strengthen can only do so by increasing the power of contraction.*

"Mercury and iodine remove morbid growths by starving them, which they effect by contracting the capillaries."

I therefore consider mercury neither stimulant nor sedative, but tonic ; that is, by its specific action on the capillaries, whether directly on their tissue, or through the medium of their nerves, it causes them to contract."

"When introduced into the system, it (mercury) circulates through the capillaries, and gives them tone to contract.

* See this same argument enforced under the head of contracting, in my work on "Life, Health, and Disease."



Liquor arsenicalis (solution of arsenic), nitrate of silver, the sulphates of copper and iron, mezereon, dulcamara, calchicum, &c., have a similar action. This is also the rationale of the mode of operation of the so-called alteratives, and of what is called stimulating the secretions of the internal organs. When their capillaries are weak, they have their tone restored by mercury, and the secretions are thus renewed; but it should not be forgotten that mercury, like some other tonics, in excess becomes poisonous; and may cause inflammation in other parts, as it does in the gums, on the principle adduced before, that one degree of contraction of the capillaries is necessary to reduce inflammation, while a still further degree will stop nutrition and bring on wasting and disease."

"And to this influence (constringing the capillaries) I attribute the universal efficacy of antimony as an antiphlogistic remedy, it being doubly valuable in acute cases, from its sedative effects on the heart and pulse, combined with its locally *tonic or astringent effects on the capillaries* of inflamed or congested parts, as well as on those of all the secreting structures.

"I think from the various statements already made, it may be deduced, that the diseases of morbid sensibility, were it proved that they depend upon inflammation," (and Dr. Billing has endeavored to show that they do,) "*are not curable by common depletion* : the medullary tissue is too fine to be affected by the force of the circulation, or relieved by taking off the vis à tergo, by bleeding, digitalis, &c. : hence neuralgia, tetanus, hydrophobia, chorea, hysteria, &c., must be reached through the circulation, by what have been called

tonics, iron, bark, arsenic, &c.”—and we have seen that these operate only by *constraining the capillaries*.

“Inflammation is that which destroys the life of the part, whereupon the separation of the dead portion takes place :” this is nothing more than Liebig’s theory of the destructive force of oxygen, told in other and more general terms.

But it is not necessary further to multiply quotations from Dr. Billing’s first principles. The whole scope and tendency of that work is to prove the position that there is but *one* immediate cause of disease, viz. *weakness*, or exhausted nervous energy—but *one disease*, viz. a *relaxed and congested condition of the vital capillaries*—and *but one remedy*, viz. the restoration of the capillaries to their normal or natural dimensions.

It is true Dr. Billing admits of *four* different kinds of remedies, but we have already seen that these are but four different instruments for enabling us to produce one grand effect, and this is, in every case, the restoration of the capillaries to their healthy size. Even narcotics, given to procure sleep, would be of but little service, if they did not more than this ; for the pain or other disease would return on waking. But they do, indirectly, more than this—for, by procuring sleep, they give time and opportunity to the inherent powers of the system to restore the capillaries to their healthy standard degree of semi-contraction—in one word, to recover their tone.

Now how does all this bear upon the hydropathic treatment of disease ? In what manner does Dr. Billing’s theory of disease support, and justify, and recommend that treatment ? It bears upon it immediately, and in the strongest and most conclusive manner. According to Dr. Billing’s

theory, the great object is, in all cases, to unload the engorged capillaries, and to constrict their coats. What are the two main features of the hydropathic treatment?—profuse sweating, and the application (partial or general, as circumstances may require) of cold—that is, profuse sweating to unload the capillaries, and the application of cold to constrict their coats. For I suppose it will not be denied by any one, for a moment, that cold possesses this power of constricting the living fibre in a most remarkable degree. Both surgery and medicine are perpetually compelled to resort to cold water and even ice for this express purpose, as, for instance, in hæmorrhages, the reduction of strangulated hernia, &c. The efficacy of cold wet cloths, applied either in the inside of the thighs, or to the back, in bleeding from the nose, is sufficiently well known, and even proverbial. That feeling of creeping, chilliness, and even shivering, which is produced by the application of cold, is a very common and well marked proof of the very powerful influence of cold in constricting the capillary vessels.

The mode of operation of the hydropathic treatment may be illustrated by what is done in the dropsy of the belly. The surgeon first *taps the belly*, and draws off the water. *Then* he applies around it a bandage, in order to support its loose and flaccid sides, and assist it in *recovering its natural dimensions*. This is precisely what the hydropathic treatment does in ordinary diseases—inflammations, fevers, the neuroses, &c., &c.,—it *taps the capillaries* (by sweating), and then *supports and constricts their sides*, by the cold bath.

Dr. Billing himself seems fully aware of the value of cold water and cold air, as a remedy. At page 23, after des-

cribing inflammation to consist of weakened, relaxed, and congested capillaries, he says : " The way to diminish the inflammation is by increasing the action (contraction) of the arteries, as by cold or astringents, which make the arteries contract, that is, increase their action."

" When the congestion or inflammation subsides without solution of continuity, it is called resolution ; and it is very intelligible how cold and astringents promote this desirable termination." Again : " A still farther proof that they (the capillaries) are in a state of morbid congestion, is the effect of cold to the loins, in renewing the secretions ; AND THE CONSTRICTING EFFECT OF COLD WATER, or cool air, in promoting the secretion of insensible perspiration, and thereby softening the congested skin, in scarlatina."

" By studying the operations of nature,* we are led to imitate by analogy. Independently of the regulation of temperature, the usual benefit derived from a poultice is that of preventing premature scabbing, by the soft moisture assisting the pus to protect the granulations. The German water-dressing has much the advantage over the poultice." And again : " Cold will cause the vessels to shrink." The effect of cold water in constricting the capillaries, that is, in causing them to shrink, may at any time be witnessed by plunging the hand, when hot, into cold water. When a person has been heated by exercise, the veins on the back of the hand will be observed, in most persons, to be very enlarged : and in delicate, thin, and weakly persons, they are almost always so towards evening. Whenever these

* It is this "*studying the operations of nature*" to which the late Sir A. Cooper was so largely indebted for his extraordinary success in *surgical* practice.

veins are in this condition, if the hand be plunged into cold water, and held there for a short time, they will be found greatly diminished in size when the hand is withdrawn.

"But often," says Dr. Billing, "the case is more obstinate, and a torpid, congested, or perhaps we should say subacutely inflamed, state of the liver, requires not merely repeated doses of calomel or other materials, but leeches and poultices, or cold wet cloths to the epigastrium," (region of stomach.) And here, in a note, he observes, "the application of cold is, I think, not sufficiently often used in inflammation of the viscera of the chest and abdomen when the surface becomes decidedly hot."

Speaking of consumption, he says : "Some years ago, a gentleman of the name of Stewart adopted a rational mode of treatment, with which he had considerable success ; but, because he could not work miracles, his plan was unjustly depreciated. His method was entirely tonic, and especially the cautious use of cold and tepid ablutions of the skin—a modification of cold bathing—a remedy that is found so universally beneficial in promoting the resolution of strumous (scrofulous) tumors.

"One thing of which I am convinced is, that the true principle of treating consumption is to support the patient's strength to the utmost"—and it must be remembered that the grand aim and principal effect of the water-cure, is to strengthen the system, thereby giving the inherent curative power the fairest opportunity of doing its own work.

Again : "Schwann, (Muller's Handbuch der Physiologie, Coblenz, 1833,) by experiment on the mesenteric arteries of small living animals, has demonstrated that I was right

as to the *modus operandi* of cold as a remedial agent in inflammation"—viz. that it acts by constricting the capillaries.

With regard to the oneness of the effect to be produced, in treating diseases, notwithstanding the hosts of different drugs and chemicals with which our national pharmacopœia groans, Dr. Billing has the following observations : "I have explained how some medicines become useful in such a variety of diseases as almost to realize the dreams of the ancients and alchymists respecting a panakeia, or an elixir vitæ ; and thus why one empirical remedy, antimony, held the reins of the "*currus triumphalis*" until superseded by the more modern blue pill. I have shown that tonics are not stimulants ; and why they may be combined advantageously with sedatives, with stimulants, or with narcotics (the ultimate effect of all being the same) ; how stimulants are tonic ; how sedatives are tonic ; how narcotics are tonic. I have shown how every medical man has his hobby to carry him to the same point, which, though he thinks it very different from his neighbor's, is as like it as one four-legged jade is to another ; how one man thinks he has made a discovery that he can cure cholera with sugar of lead, and that there is nothing equal to it ; whilst tartar emetic, calomel, Epsom or Glauber's salts, or common salt, or mustard, or lemonade, or vinegar and water, &c., &c., will do the same thing ; though none of them more quickly carry off the vomiting and purging than two of these hobbies in double harness—tartar emetic with some neutral salt, I care little which."

Thus, then, it will be perceived that the reason why we have such a multiplicity of effects to be produced, is be-

cause there is not one out of all our drugs which can be relied on, at all times, for producing the one effect desired. That one effect is the constringing of the capillaries to their normal diameters, when they have become weakened, enlarged, and congested—and in producing this effect cold water never fails.

These last observations of Dr. Billing (and indeed his whole theory) are a complete answer to those who object to the water-cure on account of its apparent oneness and simplicity; since he shows that there is but one proximate cause of all diseases, and that but one remedy is necessary; and that the great multitude of drugs has only arisen from the inefficiency of any one of them, at all times, to produce the desired effect. According to Dr. Billing, there is scarcely any one drug which would not alone be sufficient to cure almost any disease, provided that one could always be relied on to empty and constrict the capillaries. And he clearly states that different drugs are only so many different means by which different practitioners produce the same effects.

Now, then, if it be true that the one great effect to be brought about in the treatment of all diseases be to unload and constrict the capillaries, how can this be better achieved than by profuse perspiration and the cold bath? The hydropathic treatment, which unloads the capillaries by sweating, and constricts them by cold, is clearly an efficient substitute for bleeding, purging, vomiting, uva ursi, digitalis, antimony, mercury, arsenic, nitrate of silver, sulphate of copper, iodine, iron, and multitudes of other remedies, enumerated by Dr. Billing as being beneficial

merely by their powers of unloading and constringing the capillaries.

“In fact,” says Dr. Billing, “experience proves that cold to the head, with moderate saline and other sedative medicine, will cure typhus, or prevent the typhous state from occurring in synocha; whereas when wine, with or without opiates, is employed, the disease frequently proves fatal. I had one very useful opportunity of seeing the contrast of the different modes of practice during the fever which prevailed in Italy, 1817, the proportionate mortality being very much greater in an hospital, where the stimulant practice prevailed, than in that under the direction of Dr. Aglietti, in Venice, who (I suppose out of compliment) called his manner of practice the English, consisting of contra stimulants (sedative evacuants), antimony, salts, purgatives, &c., internally, with the external application of cold water and free ventilation.”

Such are the opinions of Dr. Billing with regard to the nature of disease, and with regard also to the *modus operandi* of all medicines whatever, in curing it, viz., by emptying, constringing, and strengthening the weakened, relaxed, and gorged capillary arteries. And if these opinions be true, the hydropathic treatment is obviously and even glaringly a remedy of almost universal application—if not to cure, at least to relieve—since its two grand features are those of sweating, and then of constringing, strengthening, and giving tone to the whole capillary system. And yet, opposed as this treatment is, without consideration, by the great body of medical men, if I were to repeat all the laudations bestowed on Dr. Billing’s book, both by the medical

press, and private individual practitioners, they would fill a volume.

But it requires very close attention, habits of reflection, and a perfect freedom from all prejudice, in order to discover how completely principles sometimes agree even where the practice is exceedingly different. And indeed to illustrate the truth is one of the objects of Dr. Billing's work—to show how the different hobbies of different medical men are all carrying their unconscious masters to one and the same point—capillary contraction. And when we recollect that all the functions of life are performed in and by these same capillaries, we ought not to be at all surprised to find that it is upon these that all causes of disease produce their first impressions; these are the organs whose actions first become deranged; and that it is upon these that all remedial agents must be made to operate, in the treatment and cure of all disorders.

Such are the views and opinions of Dr. Billing. And it must be remembered that Dr. Billing is no obscure physician—all theory, and no practice—but that he has been for years, and is still, senior physician to one of the largest hospitals in England, viz., the London—enjoying a field for practical observation and experiment which can fall to the lot of but few.

I will make only one more quotation—its object is still farther to show that the simplicity and apparent oneness of the hydropathic treatment is no argument against it, disease itself being more simple and more unique than is generally supposed. Thus Dr. Billing cures ague, blue cholera, and influenza, on the same principles, and with the same reme-

dies, epsom salts, and antimony, and sometimes bleeding. Yet there can scarcely be three diseases more apparently dissimilar—and certainly no three diseases can differ more as to severity and the degree of danger. “There is,” says Dr. Billing, “but one simple fever, and which is exanthematous (eruptive), petechial, though the rash may never be sensibly developed, as in scarlatina maligna; and it is continued, synchous, (synocha, *συνεχω*), whether with high or low pulse, high or low temperature; and that, when the sensorium is oppressed in addition, it is typhous.” This whole passage is printed, in Dr. Billing’s book, in italics. It is surprising to me how Dr. James Johnson could speak in such high terms of praise concerning Dr. Billing’s views of disease, and of the *modus operandi* of all remedial treatment, and yet that he should write disparagingly concerning hydropathy—since the whole of Dr. Billing’s work is, *de facto*, one long argument in its favor.

Thus I have shown that the principles of hydropathy are in strict harmony with the opinions held, and the doctrines publicly taught, by two of the most celebrated and scientific men (each in his own department,) with regard to the nature of life, health, and disease, and the true end and object of all remedial treatment, viz., Liebig and Billing—the two *Atridæ* of medical science—the Agamemnon and Menelaus—the *δύο κοσμητορες λαῶν*—of the medical profession.

I will now quit the more particular arguments of science, and endeavor to show that all general reasoning—all analogy—all the deductions of experience—also unite to add their testimony to that already given.

With regard to any danger to be apprehended from the hydropathic treatment, it only differs from ordinary prac-

tice just thus much. In ordinary practice, even in the most skilful hands, there is always more or less danger, in the administration of the most common and useful drugs, for all these are poisons of the most virulent kind, as mercury, arsenic, prussic acid, opium, oil of vitriol, aquafortis, lunar caustic, iodine, strychnine (*nux vomica*), copperas, &c., &c., all medicines daily and hourly administered internally, whereas in the practice of hydropathy there is never any danger at all—provided always it be practised by competent persons.

It is evident to the most ordinary understanding that such virulent poisons as those mentioned above, and which are in hourly use, cannot be introduced into the human stomach, even in minute doses, without always doing a certain amount of mischief—and indeed this is admitted on all hands—and that even minute doses may, and often *do*, in delicate habits, or from some peculiar diathesis, produce very powerful and dangerous effects. A case in point occurred, some time since, in one of our hospitals. A woman had been taking mercury—and one day, while sitting up in bed, eating some broth, her head fell suddenly forward, and she died instantly. A post-mortem examination explained the mystery. The atlas—a pivot which supports the head, and on which it turns—had been eaten away by the mercury until it became too weak to support the weight of the head. It snapped while bending over her broth, the neck became bent double, and instant death ensued, the inevitable consequence of compression of the spinal cord by the doubling of the neck.

Strychnine, according to Andral, produces *softness of the brain*. A young lady, having paralysis of the lower ex-

tremities, after trying many remedies, was recommended by her physician to rub in strychnine. After a time she went to a watering place, and there died. Dr. Pereira, of the London Hospital, commenting on this case in his lectures, declared that he had no doubt that this young lady's death was hastened by the strychnine.

In a case of paralysis at the Dreadnought Hospital, strychnine was exhibited, at first in doses of one-sixteenth of a grain three times a-day, then one-eighth, then one-fourth, then one-half, all without any *apparent* effect. But one night the surgeon was suddenly called to the man, who was said to be in a fit. It was a first attack of tetanus, or cramp. This first attack was almost succeeded by a second, which killed him. There can be no doubt that it was the strychnine which destroyed him.

That hydropathy can kill—and that it may kill—in the hands of the ignorant practitioner—is perfectly true. It would not be worth two straws if it could not. For that which, *when abused*, can do no harm, cannot be capable of much good when *properly used*. Such a remedy is mere “chip in porridge.” But where hydropathy has destroyed a single victim, the practice of medicine has slain its tens of millions—a position so notoriously true that I scarcely think any medical man of character will be found to question it. And the danger to be dreaded from the use of deadly drugs is greatly augmented by the great diversity of opinions which are entertained as to the effects which they produce on the body, frequently causing one drug to be given with the view of producing two opposite effects.

In a very learned and laborious work published by Dr.

Pereira, one of the physicians to the London Hospital, and chemical professor at that institution, entitled "*Elements of Materia Medica*," occur the following passages on the subjects of opium and mercury, two drugs more universally in use than any other two in the whole list. "Several physicians," says Dr. Pereira, "as Dr. John Murray, and Dr. Anthony Todd Thomson, consider opium to be primarily stimulant; some, as Drs. Cullen and Barbier, regard it as sedative" (that is, just the contrary to stimulant); "one, viz. Dr. Mayer, as both—that is, a stimulant to the nerves and circulatory system, but a sedative to the muscles and digestive organs; another, viz. Orfila, regards it as neither; while others, as Muller, call it alterative." Now here are five different men holding no fewer than five different opinions with regard to the effects produced on the body by this deadly drug, opium. When these five physicians give opium, it is clear that they give it with the view of producing five different and contradictory effects!

But Dr. Pereira proceeds thus with regard to mercury: "Again, mercury is, by several writers, as Drs. Cullen, Young, Chapman, and Eberle, placed in the class of sialogogues; by many, as Drs. A. T. Thomson, Edwards, Vavasseur, Trousseau, and Pidoux, among excitants; by some, as Conradi, Bertele, and Horn, it is considered to be sedative; by one, Dr. Wilson Philip, to be stimulant in small doses, and sedative in large ones; by some, as Dr. John Murray, it is placed among tonics; by another, viz. Vogt, among the resolventia alterantia; by one, viz. Sundelin, among the liquifacients; by the followers of Broussais, as Begin, among revulsives; by the Italians, as Giacomini,

among contra stimulants, or hyposthenics ; by others, as Barbier, among the *incertæ sedis*—or those drugs whose *modus operandi* is not understood.

After reading such a statement as this, one can hardly be surprised that the word physician should have been defined to signify, “a man who puts drugs, of which he knows nothing, into a stomach of which he knows less.”

With regard to any danger likely to result from going into the cold bath when covered with perspiration, such danger is perfectly chimerical, and a mere popular fallacy—contrary to all the deductions of science—contrary to all daily and hourly experience ever since the creation of the world—and for which no shadow of a physiological reason can be given ; while all physiological reasoning goes directly to prove that it is safer to go into cold water when the temperature of the skin has been raised, than when it has not been raised ; and that if there be danger at all, it is going into cold water without first raising the temperature—and in this there certainly is some danger. And of course it is with the elevated temperature that we have to deal in this argument, and not with the mere presence of perspiration on the external surface. For it can certainly be a matter of no importance whether the skin be covered with a certain quantity of that peculiar grease called perspiration, or whether it be covered with an equal amount of hog’s lard or white paint. And it is quite evident, and all modern writers agree that it is so, that re-action, (the great object to be attained,) will be most certainly produced, and internal visceral congestion (the great evil to be avoided) will be most certainly prevented, by going into the water when the surface of the body is warm. And I need hardly observe

that the body is not made hotter in proportion to the profuseness of the perspiration, but that, on the contrary, it is cooler than before that effect is produced, for perspiration is a cooling process. So that it will not do to say 'that although it may be good to go into water when the body is moderately warm, it is nevertheless bad to do so when it is extremely hot.' For when perspiration is present it is never extremely hot.

As to the sudden checking of perspiration, this too is a chimerical danger. For the oozing of perspiration always subsides *of itself*, almost at the moment that the means which produced it are withdrawn. And the perspiration which is still visible on the body, is merely that which has been *already produced*, and left upon the skin, by an action of the vessels which has now already ceased. The perspiration which is now seen upon the body has no more connection with the system than so much oil or other greasy matters.

I say, too, that the supposition of danger is contrary to all daily and hourly experience. For, are not our out-of-door laborers, our wagoners, our sailors, our hay-makers, and all our farm servants, constantly exposed, while bathed in perspiration, to the effects of a natural cold shower-bath, in the shape of rain, and that too with perfect impunity? Is not the constant practice of boys to bathe in rivers, without thinking for a moment, or caring a straw, whether they be in a perspiration or not? Does the North American Indian, when traversing his hunting grounds, and when he finds his path obstructed by a river, ever pause for an instant to consider whether he be in a perspiration or not, before he plunges into the flood? But the Indian is

used to it. To be sure he is, and it is to that very use and want to which he owes his great strength, activity, and unimpregnable health. And why should not Englishmen use and accustom themselves to the same thing? What is to prevent it? Why should it not be? I cannot even conceive a reason.

If there were peculiar danger in being caught in a shower while perspiring, every showery day would crowd our hospitals with its victims, and April would be the most deadly month in all the year. Nature has not adapted the inhabitants of the earth to the circumstances of the earth's surface so bunglingly. On the contrary, the nature of every living thing has been beneficially fitted to the nature of those circumstances among which it was destined to dwell ; and had a shower of rain possessed such deadly properties, our heads would have been furnished with a natural umbrella to defend it from the rain, as our eyes are accommodated with natural curtains to defend them from the dust.

In an exceedingly clever pamphlet lately published by Mr. Jackson, entitled "The Spleen a Permanent Placenta, the Placenta a Temporary Spleen," it has been reasoned out with the most beautiful precision and great force, that the spleno-hepatic vein (one of the large veins within the abdomen) is the propelling organ which drives the blood through the portal system of veins and circulates it through the liver ; and that it is congestion in this vein which is frequently the cause of a great number of diseases (epilepsy amongst others). If these views be correct, they will account most satisfactorily for the good effects of cold water, externally applied, in relieving that large class of diseases depending on congestion of blood in the liver—or what is called a slug-

gish liver. The application of cold to the bowels would necessarily cause the spleno-hepatic vein to contract upon its contents, and so empty itself, and propel the blood onwards through the liver, and thus remove all congestion there—just as cold applied to the back of the hand causes the veins there to contract upon their contents, thus emptying themselves, and shrinking to their proper size. Whatever causes vessels to contract, augments the velocity of the blood's circulation through them. And congestion of one sort or other, as we have just seen, is the proximate cause of all diseases whatever—and there is nothing which can so quickly and certainly produce this contraction of vessels, and removal of congestion, as the application of cold.

Propositions on the Principles and Practice of the Water-Cure. By Drs. Wilson and Gully.

The following propositions will show that the applications of the water-cure are in strict accordance with the facts and phenomena of the living organism ; and that without an intimate acquaintance with these last it is utterly impossible to make the applications with safety to the patient or with credit to the practice or the practitioner. Let the critical medical reader appeal, if he pleases, from our propositions to the doctrines of the schools as embodied in the works of the most celebrated modern writers on health and disease, and say whether we have not accepted those doctrines. In truth, the premises of health and disease, established by experiment and observation, stand untouched, as far as they go ; far be it from us to contravene them. It

is only in the conclusions of practice that we differ from the great body of our medical brethren. We assert the perfect right to do this so long as we can give scientific reasons for it. Such reasons are contained in these propositions. Time and experience are also daily accumulating facts of cure which come to the support of the justness of these reasons.

1. A series of unnatural symptoms constitutes a disease.

2. This disease is referable to a morbid condition of some of the textures of the body.

3. All disease is originally acute, that is to say, the symptoms are more or less rapid and pressing in their character, and more or less characterized by fever.

4. Acute disease is the effort of the morbid organ or organs to throw off their disorder upon some less important organ or organs. Thus, acute inflammation of the liver, stomach, or lungs, causes fever, that is, an effort to throw the mischief on the skin, the bowels, or the kidneys.

5. If, from the great extent of the mischief to be thrown off, and the feeble constitution, acquired or natural, of the individual, this effort is not successful, the body dies from exhaustion.

6. If this effort be only partially successful, more or less of the internal mischief remains, but gives rise to symptoms of a less rapid and pressing and more permanent character. These symptoms then constitute a chronic disease.

7. Except in the case of accidents to the limbs, we know of no disease which is not essentially internal. Skin diseases are invariably connected with disease of some internal organs, especially the stomach and bowels, and are regulated in their character and intensity thereby. This is so

true, that where there is a skin disease the crises effected by the water-cure invariably take place on the spot where it exists.

8. ACUTE DISEASE, then, is the violent effort of internal and vital organs to cast their mischief on external and less important organs.

9. CHRONIC DISEASE is the enfeebled effort of the same organs to the same end.

10. But as from the diminished power of the constitution this is always ineffectual, the morbid state of the organs tends constantly towards disorganization, or what is called organic disease. This is more certainly the case, if the original causes of the malady are at work.

11. Disease therefore is CURABLE when the power of the system is sufficiently strong to throw the morbid action from a more to a less important organ.

12. Disease is INCURABLE when the power in question is insufficient for the last-named purpose ; and when it has become organic, that is, when a change of structure has taken place.

13. From these premises it follows that the aim of scientific treatment should be to aid the developement of the power of the system and its efforts to rid its vital parts of mischief.

14. That mischief invariably consists in the retention of an unnatural quantity of blood in them, to the detriment of other parts of the organism,—a retention commonly known by the terms acute inflammation, chronic inflammation, and congestion.

15. In endeavoring to develop the powers of the system, the dissipation of this inflammation or congestion must be

constantly kept in view, as the end of which the constitutional efforts are the means.

16. But as the circulation of the blood everywhere is under the influence of the organic system of nerves, the power and efforts of these last are essentially to be strengthened in order to dissipate the inflammation or congestion referred to.

17. Curative treatment is therefore made through the instrumentality of the nervous system.

18. Violent and sudden stimulation of the nervous system of the internal organs, is invariably followed by exhaustion and increased inflammation and congestion. Hence the impropriety of alcoholic and medicinal stimulants.

19. But the gradual and judiciously regulated stimulation of the nervous system according to the organic powers, conduces to the developement and maintenance of its strength.

20. This stimulation is the more steady and certain in its results the more universally it is applied to the entire nervous system.

21. To the external skin, therefore, and to the internal skin, (as represented by all the lining membranes of the lungs and digestive organs,) this stimulation should be applied, those parts containing the largest portion of the nervous system spread through them.

22. Pure air applied to the lungs, proper diet, and water applied to the digestive organs, and water applied to the external skin, fulfil this intention of stimulation and strengthening most effectually.

23. Further, as that portion of the nervous system, (the brain and spinal cord,) in which the will resides, requires

the developement of its powers, exercise of the limbs is requisite, the stimulation of the air, diet, and water aiding thereto.

24. Pure water, pure air, proper diet, and regulated exercise, are the great agents in effecting the cure of disease, by aiding the natural efforts of the body, through the instrumentality of the nervous system.

25. In the due apportionment of these agents, according to the powers of the constitution and the phases of disease, as ascertained by minute medical examination, consists the scientific and the safe practice of the water-cure.

26. As strengthening of the system by the regulated stimulation of the nervous system, is the means, so the throwing off disease by more important or less important organs by that acquired strength, is the end of that practice.

27. During the efforts of the system thus aroused for so beneficial an end, if agents are employed which divert those efforts and tend to centre stimulus on the more important organs, augmented mischief is the certain result. Such agents are to be found in alcoholic and medicinal stimulants, applied to the internal skin and nerves; in hot and impure air applied to the external skin and nerves; and in exciting and factitious pleasures and anxious cares, applied to the great centre of the nerves, the brain.

28. These and the *mal-apportionment* of the stimulation included in water, air, diet, and exercise, give rise to the only "Dangers of the Water-Cure."

29. The proper apportionment of the stimulation in question originates and maintains a steady effort of the system to save its vital parts at the expense of parts which implicate life less immediately.

30. The result of this effort is shown in one of the following ways: 1. The re-establishment of obstructed and suppressed secretions; 2. In the elimination of diseased matters through the bowels, kidneys, or skin; 3. In the formation of a critical action of some sort on the skin.

31. Such result constitutes the **CRISIS OF THE WATER-CURE.**

32. The Crisis being the result of the extrinsic efforts of the vital organs, is to be viewed as the signal of their relief, not as the instrument of their relief.

33. Still as, during the crisis, the tendency from the internal to the external organs is most strong, it is more than ever necessary to avoid the causes which act in diverting this tendency and in reconcentrating the mischief on the internal parts.

34. At the same time, the tendency in point being then strongly established, it is not necessary to stimulate the system further in that direction, and all treatment except that which allays irritation accordingly ceases.

35. A crisis being the evidence of cure of the internal disease, no recurrence of the latter is to be apprehended, unless the morbid causes are re-applied.

CHAPTER V.

PROCESSES OF WATER-CURE, &c., 1

Drinking of Water.

THE quantity usually directed by Priessnitz is from 8 to 12 tumblers daily. His general advice is, "Do not oppress your stomach, although I wish you to drink as much as you can conveniently." Some have gone to great excess in drinking. At Graefenberg, enormous quantities are often taken without any apparent inconvenience. One gentleman, we are told, took by way of experiment $13\frac{1}{2}$ quarts in a day, little by little, taking a good share of exercise at the same time, and experienced only a slight head-ache in consequence.

Every one knows of cases in which a high burning fever has been broken up merely by drinking great quantities of cold water. How often have there been cases in which it was believed, both by friends and the physician, that the patient with burning fever could not live the night through, and the physician declaring that cold water, if taken, would be the sure death of the patient, and yet the friends, nor always over particular to follow the directions laid down, have given water to the patient, or perhaps the patient in his delirium has broken through all restraint and satisfied himself to the full extent of thirst ; and soon how changed ! Sleep, which before could not be at all obtained, or if it could

be, was only dreamy and disturbed, is now deep and refreshing ; and in the place of a dry, parched, and burning skin, there is now most profuse perspiration. The friends now behold that the fever is “broken up :” the physician comes in the morning, and exclaims, “Astonishing ! what the medicine has done !” But the medicine has been cast to the dogs.

If, in the whole-range of human science, there is any error which shows pre-eminently how loosely mankind may reason, and into what great follies the human mind may be led, it is in the supposed effect of cold water in fevers. It seems, because it was well known to be dangerous for persons in great heat and perspiration arising from over-exertion,—an artificial and most unnatural state,—to drink largely of cold water, by parity of reasoning, it must always be dangerous *when there is great thirst*. But the cases are totally different. In the case of over-exertion, if the body is allowed to remain quiet, even in a warmer place, the flowing of perspiration—a cooling process, will soon cause the body to become cool ; and indeed a cold will often be taken, unless great care is exercised to guard the body. Even in such cases, too, drinking very small quantities of water is safe and beneficial, especially if moderate exercise be kept up.

Drinking, then, in high fever, is highly salutary, and always perfectly safe, and should be reckoned as one of the most powerful means of reducing fever. Cases where it has proved injurious, cannot be found. To the utmost, the patient’s thirst should be gratified.

In other cases than fever, we have seen most astonishing effects produced by drinking water. In a certain case, a

woman of this city, as she believed, and it was no doubt true, had been poisoned by her husband: violent spasmodic action of the muscles of the extremities having come on, and a severe burning in the mouth, throat, and stomach, being present, and the woman nearly insensible, large draughts of iced Croton water were immediately given. The patient afterwards said, that so parched and heated were the mouth, throat, and stomach, that the cold water produced no sensation whatever; but no sooner was the water taken, than most powerful vomiting ensued, and much to the woman's relief. Still the burning sensations to a considerable extent would soon return, and then copious drinking would again quickly cause the same good result. After a while, the water was taken tepid, and thus the patient drank and vomited many quarts. Other means were used, but drinking was the principal treatment. The next day, she was quite well. Cats and dogs that have been accidentally poisoned by arsenic set for rats, will take water greedily, and have thus apparently been kept from being destroyed.

It is said by those concerned, that in the hospitals of this city (New York) there have been no cases of *gravel* since the introduction of the pure soft Croton water, and that many cases have been cured spontaneously. The drinking this pure soft water, and its culinary use, are doubtless the causes of those favorable results.

There has been a great deal of prejudice concerning drinking water at meals. The common opinion is that it dilutes the "gastric juice." But this opinion is founded in a wrong notion of digestion. The aqueous portion of the food taken is mostly absorbed before digestion proceeds to

any considerable extent. This objection certainly is not made to the eating of fruits, and these are composed very much of water—by far the largest part ; and so also the natural food of the infant—the mother's milk : the whey or watery part is absorbed, and the curd afterward digested. It is not true, therefore, that digestion is necessarily impaired by taking fluid into the stomach at the time of meals. Nor is it true, that the gastric fluid is present in the stomach, as is by many supposed, before food is taken into the stomach, and that its action upon the coats of the stomach causes the sensation of hunger. The gastric secretion does not take place until the stomach is excited by the presence of food.

But whatever may be said concerning theories in this matter of drinking with meals, the real facts of experience furnish altogether the best guide. From very careful observation and experiment, we are certain that, in many cases at least, of persons who suffer from indigestion, the complaint will be very sensibly mitigated, and in frequent instances be wholly removed, by free drinking pure soft water at the meals ; and then again, if indigestion is really present, whether there has been drinking with the previous meal or not, full drinking of water is the best means that can be used to remove the distressing symptoms. There will generally, or at least often, be no thirst in these cases, so that the water is to be taken like medicine, “ against the stomach.” If there have been a debauch, sometimes vomiting will take place, but the vomiting that comes on from water-drinking is comparatively easy, and causes great relief. At other times diarrhœa takes place, and still oftener neither vomiting nor diarrhœa, but a quick and certain subsidence of the symptoms. Here

it may be said, that no violence should ever be done in drinking in the way of over-chilling the body. If we wish to cause vomiting, and in some other instances, water, warm or tepid, will be the most beneficial. Cold water can generally be borne, by a weak stomach, better with food than at other times ; and why ?—because the stomach is elevated in temperature soon after the taking of food. It is then better able to act against the coldness of the water.

What effect does cold water then have upon the stomach at meals ? Do we not know that every person, day by day, through stimulants in the food taken, is literally being “drugged,” and that the coats of the stomach are thus more or less inflamed and weakened ? Suppose the face or hands are partially inflamed or feverish, does not every one know how strengthening and salutary to those parts is the application of cold water ? Precisely in the same way does cold water, in suitable quantities, act upon the stomach, as every one can prove by trial.

There is another advantage in drinking with meals ; it is this : less food is required to satisfy the appetite. It has been said, in objection to drinking at meals, that it over-distends the stomach. It is true that the stomach is almost always overtaken ; but this distension will be much sooner removed if a good share of it be from simple water. This is incomparably more easily removed by the action of the organ, than is too great a quantity of food.

Food is often taken that is of itself too dry, more so than is natural. Certain kinds, as Dyspepsia or Graham crackers, dry bread, &c., are apt to swell in the stomach as a dried apple would do. If food is taken at all in this state,

the greatest care should be exercised in mastication, but even then, drinking will be found salutary.

Some have lived weeks and months without drinking any liquid whatever. But in all such cases fluid must have been taken from some source. These have generally been vegetable and fruit eaters, and who have eaten largely of fruit ; and these contain a large proportion of water. Dr. Alcott, a man well known for his physiological, hygienic and other writings, lived without drink for more than one year, at the same time partaking freely of apples as a part of the regular meal. The moisture in the breath, perspiration, and other excretions of the body, which are constantly passing off, must be supplied from some source or other. Ordinary food even, contains a much greater portion of moisture than would be at first supposed : baker's bread is said to contain about 35 per cent. The adult human body by weight is composed of about 80 per cent. water—the blood about 90 per cent., and the brain of nearly the same quantity. This supply of fluid must be kept up.

There is another good effect to be brought about by water drinking—to prevent vomiting. We have succeeded in arresting very obstinate vomiting when the most effectual means of ordinary practice had failed, by giving water in small quantity frequently repeated. Hiccough, according to our experience, can be more readily managed by water drinking than by any other means.

Laborers who are much exposed to heat and fatigue, tell us they can get along with less drink if they are careful to drink freely at their meals.

It has been supposed by some, that water undergoes a change in the system ; but there is not the least evidence

that it is ever in any way appropriated to the formation of the animal solids of the body. It is true, however, that life can be sustained considerably longer in cases of starvation, if water is taken, than without it ; but still the water undergoes no chemical change.

Quality of Water for Drinking and Culinary Uses.

It is agreed on all hands that for all the purposes of life, whether for culinary preparations, or for drink, *pure soft water* is the best. It was believed that the pure water of Graefenberg could not be the cause of the truly wonderful cures that were there performed. It was believed that Priessnitz had some remedial agent in the sponges used, and he was prosecuted accordingly : it was only as he from the first had stated—pure soft water, with attention to air, exercise, diet and clothing. The water has been fully tested, and is found to be only pure and soft.

Since the Croton water has been introduced into the city of New York, there has been a manifest improvement in the health of the citizens. Still there are many who prefer the abominably filthy and hard water of the wells. Yet there is much of the Croton used, some preferring it, and others taking it more from convenience. During the past summer (of 1844), a season not particularly healthy, and very hot, it was stated in the public papers that the bills of mortality during some of the weeks of the hottest weather, were less than they had been for many years previously in the season corresponding—a significant fact to those who understand the effects of water, but a fact, the reasons for which were not at all commented upon in the public papers.

As in every thing in the present state of physiological knowledge, so in the matter of drinking water : people in general are guided by mere feeling. Any one who has been a time in the habit of drinking hard water, if he act merely according to taste, will prefer the hard water to which he is accustomed, to any soft water, however pure it may be. Horses will leave hard water, that is clear, for soft water that is even muddy.

Families can easily obtain soft water by depending upon the cistern and the clouds. Very cheap filters can be at any time constructed so that cistern-water can be had very pure : for instance, a large common funnel, a keg with a hole in the bottom, or something of the kind, can be used, a sponge or fine rags being pressed closely in the opening, and thus the water can be made very clear : and if there is any fear of decayed animal matter being in the rain-water, a layer of clean sand and fine charcoal over the sponge or other substance, will serve to remove this. It is the charcoal that acts as a disinfectant, removing the animal matter. There is no way of filtering out the *hardness* of hard water. Some families in and about New York and Boston have double cisterns, so that rain-water, by pressure, passes from one to the other through a large filter box, and thus the water is made as pure and limpid as can be imagined : and yet, when such water is at hand, for drink, many prefer the hard water of the well.

Injections, or Clysters.

These constitute an important part of the treatment. They are highly valuable in various complaints. The bowels can at any time be easily kept free, and the evils and

unpleasantness of constipation thus be at once removed. This application is also of great service in all bowel complaints. Severe diarrhœa, dysentery, cholera morbus and cholic, can often be speedily arrested by this application alone. In inflammation of the bowels it is of most signal benefit. The author has, in different instances, given immediate relief in this disease, when the bowels had been for days obstinately closed, resisting the action of the most powerful medicines.

This application should be made with an instrument by which no air will be introduced into the parts. Air often cause pain. It should always be carefully expelled by forcing water through the instrument a few times before it is inserted.

The quantity of water to be used will vary. As much as can be retained, be it more or less, can be taken. The temperature is to be made according to the feelings of comfort, never too warm or too cold. Many take cold water.

Some have a prejudice against this application, thinking that it will weaken the bowels like cathartic medicine or cathartic clysters, but this is not true. Pure water rightly used in this way strengthens.

Abreibung, or Rubbing Wet Sheet.

A linen sheet of coarse quality, suitable for holding considerable water, and at the same time serving well for friction, is here used. It is better to press and not wring the sheet out of the water, and it may be allowed even dripping. The patient standing ready, it is to be thrown over the head or about the neck, so as to create a slight shock,

and immediately active friction is to be used by the assistant behind, and the patient before, if able, or by another assistant. This should be continued from one to five minutes, when the skin will have become reddened and warm. This must be immediately followed briskly by a coarse dry sheet or dry cloths, until the surface is perfectly dry and in a complete glow. The patient is then immediately dressed for exercise, or for bed, as the case may be. The temperature of the water used should correspond with the strength of the patient. Those who are so feeble as to render it necessary for them to remain in bed, can be often much benefitted by a judicious rubbing while in bed. This is a highly useful and convenient application, and, if judiciously made, will produce nearly, if not quite all, the good effects of a bath, and will often be found much more convenient of application.

Wet-Sheet, or Lein-tuch..

The first reclining upon this sheet will be disagreeable. If it is to be used to reduce the temperature of the body, as in high fevers, it is well to have it of coarse quality, in order to hold more water. To apply it, the mattress of the bed or couch should be made bare, one or more large thick woollen blankets next, and the sheet last, upon which the patient is to lie. He is to be quickly and snugly enveloped, from the neck to the feet, first with the wet sheet and then with the blanket. These adjusted with care, the packing is finished by covering over the whole a light feather bed, and a quilt, or a sufficiency of other bedding without the feather bed. It will be well for the patient to drink a little water occasionally; and especially if there be great

thirst, it should be taken often, but not in too great quantity.

In cases of acute rheumatism, or gout, where it would be troublesome for the patient to be moved, or in any case where it might be better for the patient to remain quiet for a longer time, two or three sheets can be used instead of one, to act as a refrigerant for a longer time. A long towel from the armpit down, upon each side, has been recommended, so that the whole body be exposed to the wet linen.

In cases of acute fever, the sheets must be changed according to the degree of heat, every quarter or half hour, until the dry hot skin becomes softer, and more prone to perspiration. This is usually the first process of the day, and is repeated or not, according to circumstances.

The wet sheet process is of great advantage in a variety of chronic as well as acute cases; such as are attended with an irritable and inactive skin, and in a multitude of skin diseases. A frequent change of the sheets in such cases would be unnecessary as a rule. It will sometimes be well to let the temperature raise until perspiration takes place. Determination of blood to the head is to be removed or prevented by cold applications to it. Should the feet remain cold in the wet cloths, they should be extricated and wrapped in dry cloths only. At the close of the process the patient should be briskly rubbed until the surface is dry.

“The wet sheet produces two diametrically opposite effects, accordingly as it is used. If it be changed frequently, as fast as the patient becomes warm, as, for instance, in cases of fever, almost any amount of heat may be abstracted

slowly and gradually from the body. But if the patient remain for half an hour, the most delicious sensation of warmth, and a gentle breathing perspiration are produced ; while all pains and uneasiness are removed. It produces all the soothing influence upon the entire system which is produced by a warm poultice on an inflamed surface.”—JOHNSON.

For very delicate patients it has been suggested that the sheet be pressed out of tepid water, as introductory to the cold.

Respecting the application of cold water over the whole body : “ Let us now suppose that heat is abstracted from the whole surface of the body ; in this case the whole action of the oxygen will be directed to the skin, and in a short time the change of matter must increase throughout the body. Fat, and all such matters as are capable of combining with oxygen, which is brought to them in larger quantity than usual, will be expelled from the body in the form of oxydized compounds.”—LIEBIG.

“ If therefore the body contain any morbid matters, these will be expelled in the form of such compounds.”—JOHNSON.

According to Liebig, the same results may sometimes be accomplished by a very scanty diet.

Wet Bandages, or Umschlags.

Locally, water may be applied in various ways. Bandages are made to produce the same effect upon any part of the body, as the lein-tuch upon the whole body. As cooling or refrigerant applications, they should be applied of a size suited to the part inflamed, folded from three or four to

eight times, dipped in very cold water, and are to be renewed from every three or four to ten minutes, according to the necessities of the case.

As to the effect of the various partial applications of cold water to the system, "they act by determining the force of oxygen from one part to another. They produce all the effects of both bleeding and blistering, except the pain."

"If," says Liebig, "we surround a part of the body with ice or snow, while the other parts are left in a natural state, there occurs, more or less quickly, in consequence of the loss of heat, an accelerated change of matter in the cooled part.

"The resistance of the living tissues to the action of oxygen, is weaker at the cooled part than in the other parts; and this, in its effects, is equivalent to an increase of resistance in these other parts—the whole action of the inspired oxygen is exerted on the cooled part.

"In the cooled part of the body, the living tissues offer a less resistance to the chemical action of the inspired oxygen; the power of the oxygen to unite with the elements of the tissues is, at this part, exalted.

"In the cooled part the change of matter, and with it the disengagement of heat, increases; while, in the other parts, the change of matter and liberation of heat decrease."

"And thus," says Dr. Johnson, "by the judicious use of cold water alone, all the good effects of blistering and bleeding are most readily and certainly produced, without any of the bad effects. The bad effects of repeated bleeding in certain diseases are well known to medical men. We know perfectly well, that it often happens that a patient is saved by bleeding, from dying of an inflammation, only that he

may die of a dropsy ; that a patient is often saved by bleeding from dying of hæmorrhage from the lungs, only that he may die the sooner of a consumption.

Warming, or Stimulating Bandages.

These are applied by folding linen two or three times, and dipping them in cold water, or they may be made slightly tepid ; they should be well pressed or wrung out, and are not to be changed until they begin to dry. They must be well adapted to the part, and also well secured from the action of the air by a dry bandage, which is better to be a non-conductor of heat, so that the part may be raised in temperature. The combined action of heat and moisture thus produced is highly beneficial in a great variety of indurations, swellings, tumors, &c. In the water-cure, they are also much used in derangements of the digestive organs, affections of the abdomen, diseases of the liver, &c.

For the abdomen, a convenient form is made by folding and sewing together two or three thicknesses of linen, of sufficient length to pass round the body two or more times, the width varying according to the size of the person ; one end is wet and wrung out, enough in length to cover the abdomen, or to pass round the body if desirable, and then applied as tightly as comfortable—and the dry folds over in the same manner ; the whole secured by pins, or better by tapes attached for the purpose. There should always be enough of dry cloths of some kind to prevent a permanent chill.

Sweating.

In this process, the patient, being naked, is closely enveloped in a large thick blanket, with the legs extended and the

arms close to the body. The blanket must be tightly drawn and well tucked under, so that every part of the body, from the head down, is in immediate contact with it. Then over all there must be a sufficiency of clothing of some sort, (cotton comfortables are good,) all well tucked under, so as to retain all the animal heat. "Thus hermetically enveloped, the patient exactly resembles a mummy." This constrained position and the irritation of the blanket are at first disagreeable, particularly until perspiration commences, which takes place in from one half hour to two hours' time. Those that perspire with difficulty, should move the legs and rub the body with their hands, all that the position will allow. It is however more desirable to obtain the end without the exertion, if it can be done. Sometimes the head, all but the face, is also covered. When sweating commences, the windows should be thrown open, so as to admit fresh air, and the patient be allowed to take small draughts of water, a wine-glass or more every ten or fifteen minutes. This will not only be refreshing, but will also promote the sweating. If there be head-ache, or a determination of blood to the head, cooling bandages should be applied, and changed as often as necessary. If from the length of time of the envelopement, it be necessary, a urinal should be placed at the patient before the wrapping up. To allay the pain of swellings, tumors, &c., warming applications should be applied before the envelopement; otherwise the pain would be liable to an increase, before perspiration commences. Those who are very restless, should be confined by additional cloths and girths; otherwise the time would be too much prolonged. With the best that can be done, some will require four or five hours' encasement.

The best time for sweating in chronic cases, is early in the morning. As a rule, only once a day. The repetition would be the exception. In acute cases, the time of sweating will depend upon the fever, exacerbations, &c., and should be resorted to when necessary without reference to the time of day.

When the process has continued long enough, the coverings (all but the thick blanket) are to be removed. The blanket must be loosened,—about the legs in particular. An attendant should wet with a cloth the parts to be exposed to the air. The patient, if able, goes immediately to the bath, washes the head, face, neck, and chest very briskly, and then enters the bath immediately, and remains from one to six or eight minutes, keeping up constant motion and friction; and then immediately, on leaving the bath, the whole surface must be made thoroughly dry by rubbing with cloths, &c.

Those who are able should then take exercise in the open air, or in a well-aired room. Those not able should be well rubbed by attendants. No danger is to be dreaded from the sudden transition from heat to cold, in this kind of sweating, if every thing is properly done, as abundant experience proves.

This highly valuable part of the water-cure can very easily be made the means of much evil. It is an engine of great power, and therefore should be practised with the utmost caution. In cold, phlegmatic habits, where the skin is inactive, the sensibility dull, and the circulation sluggish, it is productive of great benefit. But in the sanguine temperament, where the circulation is active and the sensibility acute, or if in any case it is carried too far, it is productive

of great mischief. The *relationship* or *equilibrium*, between the two great vital functions, circulation and respiration, would be destroyed. The velocity of the circulation would be increased, without a corresponding increase of respiration, thus destroying an equilibrium, absolutely necessary to health, and which destruction, if maintained for a considerable time, must inevitably terminate with the most serious results.

“Profuse perspiration operates upon the body, first like the surgeon’s lancet, in reducing the volume of the contained fluids. Secondly, it operates like the physician’s blister, by determining from the centre to the circumference. It thus relieves congestion of the vital organs, and lightens the whole system. But it does vastly more than can be achieved either by bleeding or blistering; for it extricates from the body an increased amount of carbon and hydrogen, thus producing a *deficiency* of these elements *within it*. This deficiency of carbon and hydrogen is equivalent to a call for more food, in order to supply the place of the lost carbon and hydrogen. And thus it promotes appetite, which is more than can be said for either lancet or blister, by their warmest admirers.”—DR. ED. JOHNSON.

Preissnitz does not resort to sweating as much as he once did. We are told that where he formerly sweated fifty patients, he does not now sweat half a dozen.

Description of Graefenberg Baths. By Captain Claridge.

The entire or public bath at Graefenberg is about thirty feet in circumference, and sufficiently deep for a man of the ordinary height to plunge into up to his neck. The water is constantly renewed by springs in the mountains, the

waters of which are conveyed through pipes into the bath, and escape by an opening for that purpose, so that no impurities may remain ; besides which, the bath is emptied and cleaned twice a day : but this remark applies to Graefenberg only, as at Freiwaldau, with but few exceptions, the houses are supplied with portable baths.

The immersion of the body covered with sweat, into cold water, is exempt from danger, provided the organs of perspiration are in a state of repose. The risk which is incurred of catching cold, if, on arriving at a river to bathe, we remain until the body is cold and dry, cannot possibly exist in this case ; as we thereby abstract from the body the heat which it requires to produce reaction, and thus lose the good effect of bathing. Then if we walk fast, or a long distance to the bath, it is requisite to repose a little in order to tranquilize the lungs, after which we must undress quickly and plunge head-foremost into the water, having first wetted the head and chest to prevent the blood mounting to those regions. This precaution is strongly enforced at Graefenberg. During the bath the head ought to be immersed several times into the water. Great care is requisite in not exposing the body, between throwing aside the blanket after sweating and entering into the bath.

It is highly advantageous to keep in movement in the bath, and to rub with the hands any parts afflicted. The skin is thus stimulated, and the sensation of cold abated. People whose chests are affected must exercise moderation in the use of the bath, entering it only by degrees, and not staying in it too long. In general, the time for remaining in the bath is governed by the coldness of the water, and the vital heat of the bather ; but no general rule can be adopted

with respect to this. At Graefenberg, where the temperature of the water is from 43 to 50 degrees, no one stays longer in the bath than from six to eight minutes, many only two or three. Priessnitz advises his patients to avoid the second sensation of cold, which is a sort of fever, by leaving the bath before it is felt : by this means the patient will avoid a too powerful reaction, provoked by a great subtraction of heat. This precaution is indispensable at the epoch of the treatment, marked by fevers and eruptions. Then a reaction, produced by an immoderate use of the bath or douche, would compel the invalid to keep his bed for some days, without at all accelerating the cure.

On leaving the bath, which is found more refreshing than any one can imagine who has not experienced its effects, you are covered with a sheet, over that a cloak is thrown, and thus you go to your room, where the whole body is dried and rubbed ; and then you must dress quickly, and walk to keep up the warmth. To effect this by the heat of stoves or beds, would be acting in direct opposition to the treatment. A glass or two of water immediately after the bath, is agreeable, and should not be omitted whilst walking.

When irritation is highly excited during the cure, baths should be suspended, as they would augment it. A general washing of the body, and sitz-baths, are then resorted to. Sweating is also replaced by the envelopement of the body in a damp sheet, the repeating of which operation, together with the sitz-bath, will cause the irritation to cease.

The Half-Bath.

The half-bath is about the size of those generally used in

our houses, and is only employed in cases in which the whole bath would be too much for the strength of the invalid, who may require to be bathed for a longer time in order to excite the morbid humors. It is, in effect, less active than the entire bath, and being attended with less danger, is frequently administered to new-comers, for about a week preparatory to the large bath ; the temperature of the small or half-bath is never lower than sixty degrees.

The water in these half-baths is only about three to six inches deep. When it is necessary that the invalid should have the advantage of an entire-bath, water is poured upon him, or the attendant constantly wets the body and head with the water of the bath.

When these small baths are used, in order to be less exciting, the upper part of the body is sometimes covered, and the bath hermetically closed, so that the head only appears.

This is in cases where it is necessary that the invalid should remain in them for an hour or two. We have known Priessnitz order this for five or six hours at a time, and repeat it several days successively, in order to provoke irritation and produce fever. Last year, a doctor afflicted with an atonic gout, was subjected to this treatment, and was completely cured. It is, indeed, a common thing at Graefenberg to see invalids remain for hours thus enclosed in the small bath, and continue doing the same for days, until fever is produced ; this brings the morbid matter to the skin in the form of abscesses, which sometimes discharge themselves in sufficient quantity for the matter to fill several glasses. When this crisis takes place, the baths are suspended during the discharge of these humors, by which the system is much benefitted.

The half-bath is frequently taken by the patient immediately after he has been confined in the wet sheet. It is accompanied by a general sprinkling of the body with cold water and rubbing. Whilst still sweating, the patient should hasten to the bath, throw off the covering, previously wetting the head and chest, and the attendant should pour a pailful of water upon the head, when the face and the body must be well rubbed. This last part of the process is often continued for ten or fifteen minutes together, sometimes much longer. When the patient quits the bath he dries himself, dresses, and proceeds to take exercise in the open air immediately; but persons who have not the means of consulting a doctor acquainted with Priessnitz's mode of treatment, are not advised to attempt this.

In almost all cases of fever the patient is first wrapped up hermetically in a wet sheet, which is changed as soon as it becomes warm, and repeated until the fever has subsided. As each of these sheets will become hot from having extracted a certain quantity of the caloric from the body, it necessarily follows that a chill will succeed the subsiding of the fever; the patient is then placed in the bath and rubbed all over, by two persons, with the bare hand, until all the symptoms are abated. The patient then joins in the promenade, or at the public tables. If at night feverish symptoms return, the same operation is performed, and repeated until a perfect cure is effected.

Foot Bath.

The foot-bath is employed almost exclusively as a counteracting agent against the pains of the upper part of

the body. Priessnitz prescribes these baths for precisely the same purposes that the faculty order warm ones, yet every one knows that the feet, after a warm bath, become cold, and then the reaction is upwards, whilst, on the contrary, after a cold bath the feet become warm and the reaction is downwards. Head-ache, and tooth-ache, whatever may be their causes, particularly those that are of a violent nature, inflammation of the eyes, and effluxes of blood to the head, are almost always relieved by means of the foot-bath. To this should be added the application of wet bandages, without dry ones over them. The tub, or basin, in which these foot-baths are taken, ought only to contain warm water from two to three inches deep, or just enough to cover the toes ; for the tooth-ache, one inch is sufficient ; and the bath may be applied for some fifteen minutes to half an hour. In cases of sprains, the feet must be put in water up to the ankles. The water, when it becomes lukewarm, should be changed. The feet, during the whole time, should be well rubbed by the hand, or against each other, in order to promote a strong reaction. Care must be taken that the feet are warm before they are put into water, and exercise should be taken immediately afterwards, to bring back the heat to them. Rubbing them with a dry hand assists this very much. Cold foot-baths are sure means of preventing tendency to cold in the feet ; the application of hot water only weakens the skin, and renders the feet more susceptible to cold. When they are extremely cold, instead of exposing them to the fire to warm, it is much better to produce the effect required, by exercise. If we want any proof of the reaction caused by the foot-bath, and its powers of preservation from catching cold, we have

but to feel our feet an hour or two hours after the bath, and we shall then find them extremely hot. If we cannot avoid being exposed for a long time to a piercing cold, it is well to take a cold foot-bath two hours previous to going out. After great fatigue, a foot-bath of this description, before going to bed, is most refreshing. Gouty subjects should not use these baths without advice ; but to people in general, Priessnitz recommends their frequent use. He contends, that in the feet many of the most serious complaints commence.

Homer, when he stated Achilles to be invulnerable except in the heel, no doubt knew that the feet were the most important parts of the human frame. The poorer people, who wear neither shoes nor stockings, or whose feet are constantly exposed to a sort of foot-bath, are seldom subject to those complaints which attack the upper region of the body.

An Irish gentleman, thinking to do his shepherd a service, who had lived in a low marshy situation for many years, sent him to another estate, which was high and dry, and asking him how he liked it, he replied, "Not at all ; he had never been well a day since he had been there, for there was not a drop of water to wet his feet."

Head Bath.

Head-baths are used for rheumatic pains in the head, common head-aches, rheumatic inflammations of the eye, deafness, loss of smell and taste. They tend to disturb the morbid humors, which nature generally evacuates in the form of abscesses in the ears. They are also used to prevent the flow of blood to the head, but in this case only for a few minutes, in order to avoid too great a reaction. These

should be followed by exercise in the open air, in the shade. This bath is used as follows : a wash-hand basin should be placed at the end of a rug upon the floor. On this rug the patient should extend himself, so that his head may reach the basin, at the bottom of which may be placed a towel for the head to rest upon. Then the back of the head must be placed in the water ; then one side ; and lastly, the other side of the head. All this is terminated by again placing the back part of the head in the water.

The duration of this bath depends upon the nature and extent of the disease. In chronic inflammation of the eye, each part of the head should remain in water for fifteen minutes ; and as long for deafness, loss of smell and taste. All this will occupy an hour, during which time the water should be renewed twice.

If these baths and foot-baths are continued with perseverance, success is certain. This success is generally announced by violent head-aches, until the formation of an abscess takes place, which finishes by breaking.

For the common head-ache, the back of the head may be exposed to the water from ten to fifteen minutes ; and each side from five to ten minutes ; if it is obstinate, a foot-bath and a sitz-bath, both slightly chilled, should be used for half an hour each.

Finger Bath.

For whitlows the finger is placed in a glass of water, three times a day, fifteen minutes each time, the finger and hand bandaged ; then the elbow must be placed in water twice a day, and a heating bandage placed on the arm above

it; this will have the effect of drawing the inflammation from the hand.

Eye Bath.

Water is held to the eye, which for a minute is kept closed, and then opened for five minutes in a small glass, made for the purpose, in circumference about the size of the eye. The head-bath is generally used with this bath, but the latter is repeated oftener, and in most cases where there is inflammation, a fomentation is applied to the back of the head on going to bed, and another at the back during the day. For weak eyes the forehead is bandaged on going to bed. Sitz and foot-baths form part of this treatment.

Leg Bath.

The thighs and legs, when afflicted with ulcers, ring-worms, wounds, or fixed rheumatic pains, ought to be put into a bath so as to cover the parts afflicted. The object of these baths is for them to act as stimulants. They may be taken for an hour, and sometimes longer: they always determine abscesses, and where they already exist, they cause an abundant suppuration. They are also applicable to any other members afflicted in a like manner.

The Sitz Bath.

For want of a better term, we adhere to that of the Germans, and instead of a sitting we call it a sitz-bath.

This is a small flat tub, of about seventeen inches in diameter, with water seldom more than three or four inches

deep ; in this people sit as in a hip bath, with their feet resting on the ground, for different periods ; a quarter of an hour, half an hour, an hour, or more, as may be deemed sufficient. This, in some cases, is repeated two or three times a day. The sitting bath is considered by Priessnitz to be of so much importance in his treatment, that those patients are considered quite as exceptions for whom it is not prescribed. It has the effect of strengthening the nerves, of drawing the humors from the head, chest, and abdomen, and relieving flatulency, and is of the utmost value to those who have led a sedentary life.

The object of using so little water in this bath, the half-bath, and foot-bath, is, that a re-action may the sooner be effected. If a greater body of water were used, it would remain cold during the whole time of its application, and cause congestions to the upper regions ; whereas, in this case, it almost immediately attains the heat of the blood ; and admits of an immediate re-action.

To prevent the former, the patient should apply a wet bandage to the head : and to succeed more effectually in the object for which the sitz-bath is prescribed, he should rub the abdomen as much as possible with a wet hand.

Drop Bath.

“This term is applied to single drops of water falling from a height of several fathoms. For this form of bath a vessel is used filled with very cold water, and furnished with a very small aperture, through which water passes in the form of drops. The small aperture should be partially closed by a plug, to prevent the drops from following each other in rapid succession. By these means their operation is

considerably increased, and it becomes yet more potent if we allow the drops to fall upon a particular part at certain periods, and rub the part during the intervals. The reaction about to commence will indeed be thus interrupted, but will afterwards make its appearance in a more powerful energetic form.

The violent excitement and irritation of the nervous system produced by these baths, render it necessary to restrict the use of them to half an hour; nor are they indeed adapted for vital parts, or such as are abundantly supplied with nerves.

They are often used with more effect in obstinate and chronic cases of paralysis, than the douche or affusion, with which they may alternate. Powerful and continued friction with a horse-hair glove is never in this case to be neglected after the baths."—WEISS.

The Douche Bath.

The douche, of all the means employed, is the most powerful in moving the bad humors, and disturbing them from the position which they may have occupied for years: they are also used in the greater number of chronic diseases. The douche corrects the weakness which the skin may have contracted in the process of sweating, and also fortifies it. It hardens the body, and renders it capable of supporting all variations in the atmosphere. It exercises a powerful action upon the muscles and nervous system, by the re-action which it provokes. What is understood by a douche, at Graefenberg, is a spring of water running out of the mountain, conveyed by pipes into small huts, where it falls from the top in a stream about the thickness of one's

wrist, which fall constitutes the difference between the douche and a shower bath ; outside this hut is another for dressing, constructed like the first, in the rudest way imaginable.

There are six douches in the forest of Graefenberg, the fall of the first is fifteen feet ; the second ten feet ; the third twenty feet ; the fourth eighteen feet. The douches set apart for women have a fall of twelve feet each : the diameter of the fall is the same as in those of the men.

At the colony there is a douche which is available all the winter : this is not the case with the others. About half a mile out of the town of Friewaldau, there are four more douches, resorted to by both sexes. Nearly all the douches are at some distance from the places of residence of the patients, which occasions a walk to arrive at them, so that the body is in a glow, and better calculated to be benefited by the effect of the water, when submitted to the process.

Parts afflicted should, for the greater part of the time, be exposed to the action of the douche, though it must be received occasionally upon all parts of the body, except on the head and face, unless this is especially ordered by Priessnitz. Weak chests should also avoid it on that part and the abdomen, otherwise the fall of the water on the lower part of the stomach or belly is not injurious. The atony of this region will not, however, always resist these means. The relief afforded by the douche, sometimes in a few minutes, in arthritic cases and rheumatism, is almost miraculous.

The douche being intended to put the morbid humors in movement, ought to be discontinued when it produces

feverish excitement, and be commenced again when that has ceased.

The time recommended for the douche by different authors, is from one half minute to fifteen minutes. This, as all other strong impressions on the body, as a rule, should never be made with a full stomach, and generally not more than once or twice daily.

“The most intense expression which can be made by the application of cold water is by the douche—and there must be in the system a very considerable amount of vital force to enable the patient to bear this mode of application. A misapplication may so far lower the vital resistance as to make the re-action exceedingly difficult or even impossible. It may knock the patient so violently down as to make it difficult for him to get up again—thus giving rise to dropsical swellings of the legs and feet, venous congestion, piles, varicose veins, and other symptoms of deficient vital actions. It sometimes produces the most extraordinary effects, as weeping, laughing, trembling, &c. In its proper place, however, it exercises a most powerful influence over disease; and seems to exert an especial impression upon the absorbents. I have seen tumors of long standing most rapidly absorbed, and disappear, under the use of the douche.”

CHAPTER VI.

Shower Bath.

The shower is probably the best form of bath for daily use, provided an abundance of water can be had. There are many of these used in New York since the introduction of the Croton, and more particularly since the subject of water is of late receiving a greater share of attention. One advantage of the bath of this kind is, that it can be taken so quickly ; and then also the constant shower of water is so cleansing and invigorating.

In this, as in every kind of bath, the head should be the part first to commence upon. If the hair is long it can be guarded by a close oil-cloth, or India rubber cap, but always the face, temples and neck, should first be wet. This prevents the blood from rushing to the head—an objection that has been made to the shower bath. If one is highly sensitive to the impression of cold, the shower will be more bearable, provided loud and continued exclamation be practised while under the bath. The exertion seems to keep the blood outward. Brisk motion, as dancing and jumping, with friction, should be at the same time resorted to, and then the body should be quickly rubbed dry, and exercise be taken, or a weak person can go to a warm bed. The body should be made thoroughly comfortable.

We have known weak invalids who had scarcely ever taken a cold bath, to commence in midwinter with the

shower, beginning in the morning immediately on coming from a warm bed, and in the course of a few weeks, such persons have gained an amount of health and strength which, for years, they had not known. Rheumatism, incipient gout, giddiness, indigestion, with its long train of symptoms, and the like, have often in a remarkably short time been removed; and individuals of a pale, sickly and sallow look, have acquired the ruddiness and bloom of youth.

In a few instances, those who were weak and sensitive to cold, have been taken with a sudden neuralgiæ or rheumatic "twinge," but this is oftener than otherwise caused by the bath being continued too long, or the person not keeping up sufficient exercise and friction. This generally passes off at once, and has never, in our experience, been alarming. Still it should be avoided.

A Bath for every one.

An intelligent correspondent writes us of an ingenious contrivance for bathing, as follows:—"I purchased 3 yards of twilled cotton, cut it in two pieces, had them sewed together; then I got enough old rope (about the size of my finger,) to go round it, and had my square piece of cotton cloth bordered all about its four sides, with the rope. I then took it to the painter, and had it oiled over on one side on two coats, and dried. This made me a perfect bathing mat. I place a pail of water upon it, and with a sponge I wash all over. After I have done, I take it up by the four corners and pour out the water. It is wiped and folded up. When I travel, this always goes with me, upon my trunk." This individual knows well the power of water, for after

having suffered for many years from a rheumatic complaint which had resisted the best of medical treatment, he was cured in a few months by water.

How often should a Bath be taken ?

We know of no exception to the rule that a bath should be taken daily. Every sick person, in whatever condition, or however weak they may be, should have the whole body rubbed over with wet cloths, sponges, or the like, at least once every day. In some cases great caution will be needed that it be done safely. Let those who have lain for days upon a sick bed without any ablution, as is generally the case in the common practice of medicine, try, when the body is warm, the rubbing it all over, little by little, following briskly with dry cloths, and then covering the parts warmly, according to the feelings of comfort, and they will find it a most powerful tonic, and an application productive of great comfort. Physicians have yet many simple lessons of this kind to learn.

We repeat, every individual, old and young, male and female, sick or well, should have a daily bath. And in case of indisposition, instead of less attention to bathing, bathing the more should be given. There is no condition in which Nature would say "stop ;" but rather she asks at our hand assistance.

Vapor Baths.

Among those who advocate and practise water-cure, there seems to be a general opinion that vapor-baths are injurious. The objection most commonly made is, that the vapor too much excites the circulation, causes a rushing of

blood to the head, and by this undue excitation or stimulation the body becomes weakened. It is an easy matter to cause injury by vapor baths. If it is made too powerful, or is too long continued, severe head-ache, and even fainting, may be caused. But this is the abuse. If a patient is wrapped in a dry blanket or a wet sheet to perspire, precisely the same injurious effects can easily be caused. With a good apparatus, there is no difficulty in regulating the vapor-bath so that it will be as mild as one pleases,—as mild in temperature even, as the wet sheet in the way ordinarily used to cause mild perspiration.

It has been objected, that in vapor-baths the heat is from a foreign substance, and that, therefore, it must be debilitating and weakening. But the same objection may be made respecting the sweating blanket or the wet sheet causing perspiration. The natural heat of the body being 98° F., there is constantly passing off in every direction a considerable amount of heat, unless it is some way obstructed ; but if this heat is obstructed, as by the non-conducting blankets, as used in the wet sheet or sweating envelopement, and is retained at the surface of the body, or is thrown back upon the surface, the effect is not different from what it would be if the same amount of heat from any other source were applied in a similar way.

In many cases, we are confident from experience, that a vapor-bath suitably arranged, with a cool or cold bath after it, is better than to lay for hours in an envelopement. The time thus gained by the vapor-bath is very valuable for exercise in the open air, and is often better than for the patient to be laying in a room perhaps not over well ventilated, as is generally the case.

To prevent too much blood at the head, a cold wet cloth, or a frequent washing the head and temples in cold water, is very useful. A head-ache or faintness are the first symptoms denoting that the bath is too powerful. The vapor-bath should never be used in such a way as to cause head-ache or faintness. Such effects are never needed, and are always more or less pernicious.

The Thompsonians, or "steam doctors," as they are sometimes called, have been unmercifully and ignorantly vilified by many whose ignorance in certain cases superseded that of the ignorant ones among the "steamers," in proportion as it was more "scientific." Who does not know that the Thompsonian has often relieved patients in a most remarkable manner, when the "scientific" practitioner was compelled to "give up." A good vapor-bath, and a thorough cleansing of the skin, will often cause such speedy relief, that it is reckoned an accident rather than otherwise that relief is obtained. The remedy appears too simple to cause any marked result.

Physicians generally seem to think it a thing of little consequence to pay any regard to the skin. Day after day, week after week, and month after month, patients are allowed to lay suffering for want of a cleansing of the skin ; and in cases, too, where such a cleansing of the skin would cause more sudden relief than any thing else that can be done. We knew a physician of very extensive practice who had under treatment a person with obstinate fever. After having done his utmost without any good success, he thought he would try vapor "to get up an action," as it was called, and to do this some common barrel hoops were cut in two, and the half hoops were placed over the patient in bed to

elevate the clothes, and then by hot stones or bricks wound in wet cloths, placed under the bedding thus elevated, a genial pleasant vapor was caused all about the body, and thus by this simple means, the patient was at once greatly benefitted. It was just the thing needed. The patient rapidly recovered.

We lately had a patient who had been treated many months, and who, on leaving home, was given by his physician written directions, and to "wind up," it was recommended that by all means he should take vapor-baths, should he be where they could be obtained—as if a vapor-bath could not be had any where. He had been treated all this time without any. It is easy to give a bath of this kind in the following way: A number of bricks or stones are heated red hot. The patient is to sit upon a cane-bottom, or open-work chair, (the clothing being removed,) with a couple of woollen or other blankets pinned about the neck. A vessel of water, a common tin pan is as good as any thing, is placed under the chair, and into this water the hot bricks or stones are to be dipped, little by little, so that the vapor rises from the surface of the water. The body can thus be easily brought into perspiration.

The ancient Romans frequently used the vapor-bath, and the cold one immediately following. The Russians go from vapor-baths even at 150° F., and plunge in very cold water, or roll in the snow. Wm. Penn saw the vapor-bath and the cold immersion used with remarkable success among the Indians of our own country; and at the present day, among the red men of the forest, the vapor is an important agent in the treatment of a variety of diseases.

Tepid, Warm and Hot Applications of Water.

One great objection to the new system, is the supposed *chilling* effect of the treatment. It is supposed by many that the new mode consists wholly of horrible applications of *cold* water. Physicians themselves are not always over-particular in avoiding exaggeration on this point. It is found to be quite a good "bug-bear," with which to frighten people, by basely stating that weak infants, children and old persons are all to be subjected to the one horrible thing—*cold water*.

In many cases no cold water at all is used, unless it be a little in the way of drink. It may be laid down as a rule, that whenever warm or hot applications are more agreeable to the feelings of the patient in subduing severe pain, as in severe colics, certain inflammations of the bowels, cramps in the stomach and bowels, pain in the back, pleurisy, or pain within the ribs or chest, &c., &c., the best rule we know of is to consult the feelings of the patient. If there is high, burning inflammation, cold applications will be the most agreeable, and the best; but when there is pain without high, burning inflammation, the warm or hot applications are to be used. Let the following case illustrate :

An individual had eaten too heartily at dinner, and of food in his case indigestible. Very improperly, a full supper was taken upon this indigestible dinner, which soon caused, in the stomach and bowels, an excruciating colicky pain. In similar cases, the man had removed the difficulty by clysters and vomiting, caused by lukewarm water. At this time, however, these means failed, giving only partial

relief. The author being called, he directed that the patient have warm bricks to his feet, and at once large towels folded over, to be slightly wrung out of water as hot as could be borne, and applied all over the abdomen and a part of the chest. These were changed unremittingly, as hot and as often as the patient desired, and very soon brought relief,—sooner than could have been done by any drug opiate whatever. The bowels were also again freely purged, and the acid and indigestible substances removed from the stomach by much drinking of tepid water. After all pain was removed, and the stomach and bowels were well cleansed with pure clean water, it would have been well to have applied the tepid wet sheet to sleep in. This not being convenient, and not being very essential, it was omitted. A good night's rest was obtained. The individual lived nearly fasting the next day, drinking, however, a large quantity of water, mostly with the chill off, and then returned gradually and cautiously to a more full diet, and thus avoided all pain. In inflammation of the stomach and bowels, in almost every case where those frightful relapses take place, impropriety in food is the cause. In this case, had not relief been soon given, there would inevitably have resulted a very violent inflammation—in the stomach and bowels, always a most formidable disease.

A medical friend whom we highly esteem—a man who is never afraid to break away from old usages, provided he can see a better way, lately informed the writer, that in a case of most excruciating cholic which fell under his treatment, when ordinary means had failed to bring relief, he caused the man quickly to be wrapped in a blanket wet in hot water, and this simple application caused immediate relief. It is as-

tonishing to witness what can be often done by so simple a means to relieve pain. The same principle was used by the ancients to some extent, and has been more or less through all periods of time. The relief caused by applying the warm skin of an animal just slain, or by putting the patient into the warm carcass of an animal, an ancient mode, is upon the principle of warmth and moisture to soothe.

To propose a warm or tepid sheet would perhaps only excite the ridicule of some who advocate water-cure. But it is certain that these are sometimes the best. We sometimes prescribe warm wet sheets, for there are cases in which it would not be safe to apply the cold one. It is not productive of any sort of good for a weak person to lay shivering in a cold wet sheet an hour or more, hoping afterwards to get warm. Injury has been done by such means. It may be laid down as a rule, that when the body is cold, it should not be made colder, but instead it should be made warmer; and if this cannot be done by natural means, as by exercise, then artificial means should be used. Still the direct effort of heat is always weakening. The question then, in warm or hot applications is, whether they are not on the whole, of evils the least.

Warm and hot foot-baths are often very useful. But in such uses of water, a cold application following should be used to counteract the weakening and relaxing effect of heat.

Temperature of Baths, &c.

Sensations from water alter very considerably, according to the temperature of the atmosphere, state of health, &c., &c. Hot baths are from 98° F., the temperature of the blood, upwards. Warm baths are generally reckoned

from 92° to 98° ; tepid, below 92° . A tepid bath to one, may appear cold to another. As a rule, the colder the bath, if well borne, the better. The direct effect of warm baths is to weaken. Whenever they are taken, the time should be very short, and they should be immediately followed by a cold plunge, dash, shower, or at least rubbing with a cold wet cloth. It is well known by some housekeepers, that "washing day" can be borne with much less fatigue if most of the water used be cool or cold.

As to different sensations, here is a curious fact. Atmosphere 55° F.; body comfortable. Took three basins of water at 60° , 70° , and 80° . Placed one hand in the water at 60° , the other in the water at 80° . Let them remain 30 seconds, and then placed both hands in the water at 70° ; to one it was cold, to the other warm.

It is said that in a road over the Andes, at about half-way between the foot and summit, there is a cottage, in which the ascending and descending travellers meet; the former, who have just quitted the sultry valleys at the base, are so relaxed that the sudden diminution of temperature produces in them a feeling of intense cold; while the latter, who left the frozen summits of the mountain, are overcome by distressing sensations of extreme heat.

Cautions in the use of Water.

Every one knows water may be made the means of great mischief. According to the celebrated Dr. Currie, of Liverpool, water may be safely used at any time when there is no sense of chilliness present, when the heat of the surface is steadily above what is natural, and when there is no general or profuse perspiration. For a full bath, general af-

fusion and drinking, these rules were by Dr. C. deemed fully sufficient for safety ; and yet we are often told, that such men as Dr. C. and Priessnitz can manage water safely and with it do wonders, but that practitioners in general would not be able to make those nice distinctions, and would consequently do much mischief. Better by far, had it been if drugs were no more dangerous than water.

To the above may be added, as a rule, no strong impression should be made with water, externally or internally, within about three hours after a meal. A bath upon a full stomach may be very injurious. But if there is indigestion, colic, or inflammation, water should be used at once, in a way suited to the case.

Perspiration caused by the envelopement, or by vapor baths, does not come within Dr. Currie's rules. It is well known that a cool or cold bath rightly taken is not dangerous immediately after sweating, if this is not caused by over-exertion.

Air and Exercise.

It will be observed that these important adjuncts to any kind of treatment, share largely in the water-cure. Priessnitz insists that all who are able shall take an abundance of out-door exercise regularly. The value of such exercise is inestimable. Every one who observes at all respecting it, knows the invigorating effect it has upon the system. The cases given by different authors in this work will furnish sufficient directions in reference to these adjuncts :

“ Priessnitz's first endeavor is to alleviate pain, so that the

patients may avail themselves of air and exercise. How far this object is attained may be judged of, from the circumstances that out of 500 or 600, the usual average number of patients under his charge, there are seldom a dozen of persons in bed at one time. If their complaint be fever, he is so completely master of the case, that no one ever keeps his bed, and seldom his room, for more than two or three days, excepting in cases of typhus, a malady which generally takes twelve or fourteen days to eradicate, but hardly ever longer. The same remark will apply to rheumatism. If the sufferer can only reach Graefenberg, he may be sure of immediate relief, such as elsewhere would be called a cure, and which is repeated many times a year ; but the cure can only be regarded then as just commenced, it being Priessnitz's object to eradicate the cause of malady from the system. What is understood by a cure at Graefenberg, is a perfect cleansing of the body of all impurities, a radical cure of that which has been the source of disease. Cases of no very long standing succumb to the treatment, sometimes in two or three months ; others resist for one or two years. Supposing, for example, a young man to be attacked by gout, let him apply to Priessnitz, and he will be cured immediately ; but another, who has inherited it from his family, and who has been a *bon vivant* himself for a number of years, cannot expect to be made a new man, but with the exercise of patience ; yet he will have this satisfaction, that during the cure he will find himself, in other respects, in perfect health, never be confined to his room, and be able to take plenty of exercise."—CAPTAIN CLARIDGE.

Clothing.

Priessnitz requires of his patients that they lay aside their flannel and cotton. He holds "that they weaken the skin, render people delicate, and less able to contend against atmospheric changes." When objections are made, he says, "Wear it, then, over your shirt; but when you are accustomed to cold water, you will not miss it. After the bath, which you have now taken, run or walk until you provoke perspiration. You need then have no fear of catching cold."

Diet.

Some who advocate the water-cure, as practised by Priessnitz, have made objections to the diet. It is not pretended but that it is improveable. When it is said of his patients that "they eat too much," it is only saying what is true of civilized man the world over. When Professor Mott of this city, (New York,) in one of his lectures, said there was as much need of temperate eating societies, as there was of temperate drinking societies, he by no means meant to be understood as placing a low estimate upon popular temperance societies; he was fully aware of the undeniable fact, that excessive alimentation is a most fruitful source of disease. Admitting that the diet at Graefenberg is not in all respects what it should be, as it is not, to obtain the best results in treating disease, it only goes the more strongly to prove the power and value of the water-cure. In some important particulars Priessnitz has shown his good sense and judgment, all must admit, who are well informed on the subject of diet. "He deprecates all exciting things, such as

tea, coffee, wines and spirits, and recommends cold aliments rather than hot. A rule for dieting (in disease, second in importance to no other,) is that which relates to *quantity*. In the process of starvation, it is a well-known principle that the substances or parts of the body least essential to life are the first to be wasted, and on this same principle, in cases of shipwreck and other accidents, tumors have been known to disappear rapidly, and old ulcers to heal in a very short time, with those who have been thus subjected. This rule, of course, will not apply in *all* cases of disease.

“I know a gentleman,” says Dr. Johnson, “who was entirely cured of an obstinate permanent stricture by adopting a very severe course of abstinence, as it regards both food and drink, for two or three weeks. I am also acquainted with several other very severe cases of disease, entirely cured by the rigorous adoption of a severe diet—but *always in connection with a very mild course of the water-treatment.*”

Diet and Digestion.

The following rules are drawn from Dr. Beaumont's well known Observations and Experiments, perseveringly made upon a healthy young man, whose stomach was exposed by a wound which healed, leaving an external opening. The rules are valuable for all, whether sick or well.

1. Bulk is nearly as necessary to the articles of diet as the nutrient principle. They should be so managed that one will be in proportion to the other. Too highly nutritive diet is probably as fatal to life and health as that which is insufficient in nourishment.

2. The more plain and simple the preparation of food, and

the less of seasonings of any kind, the better for the health. Stimulating condiments, (salt, pepper, vinegar, mustard, &c.,) instead of being used with impunity, are actually prejudicial to the healthy stomach. Though they may assist the action of a debilitated stomach for a time, their continued use never fails to produce an indirect debility of that organ. They affect it like alcohol or other stimulants.—The present relief afforded is at the expense of future suffering.

3. Thorough mastication and slow swallowing are of great importance.

4. A due *quantity* of food is of the utmost importance. There is no subject of dietetic economy, says Dr. B., about which people are so much in error, as that which relates to *quantity*. Dyspepsia is oftener the effect of overeating and overdrinking, than any cause.

5. Solid food, if properly masticated, is more easy of digestion than soups and broths.

6. Butter, fat meat, and all oily substances, being always hard of digestion, tending to derangement of the stomach, are better omitted.

7. Alcoholic liquors of every form, the various stimulating condiments, as mustard, pepper, spice, &c., tea, coffee, and narcotics of every kind, all tend to debility, derangement, and disease of the stomach, and through it, of the whole system.

8. Simple pure water is the only fluid necessary for drink, or for the wants of the system. The artificial drinks are all more or less injurious. “*Tea and coffee*,” says Dr. B., “the common beverage of all classes of people, have a tendency to debilitate the digestive organs. Let any one who is in

the habit of drinking either of these articles in a weak decoction, take two or three cups, made very strong, and he will soon be aware of their injurious tendency; and this is only an *addition* to the strength of the narcotic which he is in the constant habit of using."

9. Violent exercise very soon after a full meal is injurious, but gentle exercise promotes digestion. Sleep soon after a meal is better avoided.

10. Strong mental exercise and emotions of the mind, as grief, anger, fear, &c., particularly with a full stomach, tend to impair digestion.

The Crisis.

One most remarkable feature in the water-cure, is the Crisis, as it is termed. It is said that at Graefenberg it is really amusing to observe with what anxiety it is looked for by the patients. In most cases it proves the certain harbinger of a good cure. "The patients themselves are constant witnesses of this fact, and it is no wonder, therefore, that they should look forward with pleasure and hope to its advent in their own persons. A patient is no sooner missed from the table, than the question goes round, 'Has so-and-so got a crisis?' And if the reply be in the affirmative, the report spreads like the news of a fresh victory, and his friends assemble around him—not with long faces to condole him—but with merry smiles, and laughing jests, to congratulate him on his happy fortune." "The following allegorical lines from Southey," says Capt. Claridge, "might with great justice be literally applied, by the individual who has passed through the crisis, and been restored to health:"

“Most blessed water! Neither tongue can tell
The blessedness thereof, nor heart can think,
Save only those to whom it hath been given
To taste of that divinest gift of heaven.
I stopped and drank of that divinest well,
Fresh from the rock of ages where it ran ;
It had a heavenly quality to quell
All pain. I rose a renovated man ;
And would not now, when that relief was known,
For worlds the needful suffering have foregone.”

“The crisis is generally ushered in by a sense of uneasiness, a loss of sleep and appetite, an alternate change from heat and cold, and lastly by all the symptoms of fever, which is sometimes violent, but always of short duration, if properly attended to. At its termination, the alvine and other evacuations are more plentiful, and accompanied by a more copious separation of extraneous matter than ordinarily ; sometimes by several of the excretory passages at the same time. This increased secretion is generally accompanied by a variety of eruptions of the skin, by boils, abscesses, ulcers, &c.”

“The term crisis applies to any very marked disturbance of the system, or cutaneous change ; as the crisis fever, odorous perspiration, odorous urine, vomitings, diarrhœa, hæmorrhoidal discharge of blood, and various kinds of eruption on the skin.”

In very many cases of cure, there is said to be no perceptible crisis of any kind. There appears to be no very general rule respecting it. In some old and obstinate cases of gout, mercurialism, &c., it may take place as many as from three to five times, before the cessation of the disease, and the re-establishment of perfect health.

The "Crisis." By Sir Charles Scudamore.

The very important matter of *crisis* is always sought for with much solicitude both by Priessnitz and the patient. He believes that it could not be produced in a healthy man ; and that its occurrence is a sure proof that nature is successfully exerting herself to throw off the disease, by the exit of bad humor from the mass of blood. It is a sort of wholesale theory, and equally serves for all persons, and for every known disorder ; and assuredly is the most convenient for one ignorant of medical science. I conceive that Priessnitz must have been gradually led to this idea of morbid blood by the observations which his experience enabled him to make ; for, as before explained, he entered into the water-cure practice* by accident, and not from tuition. His principles have arisen out of practice as an empiric art, and were not as a precursor first implanted in his mind. He has, in innumerable instances, so that the contrary forms the exception to the rule, witnessed the formation of crisis in the progress of the water-cure, amongst which boils take the lead in pre-eminence and importance of character. But the term also applies to any very marked disturbance of the system, or cutaneous change ; as the crisis fever ; odorous perspiration ; odorous urine ; vomitings ; diarrhœa ; hæmorrhoidal discharge of blood ; and various kinds of eruptions on the skin. It was a fact of ordinary occurrence, presenting itself to the mind of Priessnitz, that the great crisis of boils, in proportion to their free suppuration, proved

* I employ this term in its just signification, meaning experience, not charlatanism, from which I believe Priessnitz to be entirely free.

in the highest degree remedial, removing chronic pains and internal sufferings of long standing ; and that no marked amendment did take place until the event of some crisis. Also the additional fact must be mentioned, that very frequently indeed the boil crisis would appear in the immediate vicinity of the disease, sometimes on the very spot. It is no longer surprising therefore that the idea of humor in the blood should be strongly confirmed in the mind of Priessnitz, and have grown with him into a rule of practice. The patient very naturally cares not for the absence of scientific explanations, but renders his faith to fact, and to the long list of very extraordinary cures which have been performed, after the failure of regular medical art. But it will not be uninteresting to examine more closely this doctrine of the bad blood, with reference to crisis and treatment.

In the case of morbid poisons, as, for example, small pox, measles, and scarlatina, nature evidently makes a vigorous effort to free the blood from the virus, by producing in the skin a characteristic eruption, attended by a symptomatic fever. After a certain period, health returns, and no remission of the poison occurs. I adopt this illustration to shew that the blood can in this manner, by the medium of the skin, clear itself of the offending cause, however difficult the explanation may be. In the very familiar examples of cutaneous disease, as erysipelas, the shingles, nettle-rash, &c. we commonly refer to the blood as the source of disorder, although we can only generalize our notions ; or, by other theory, we may regard these disorders as the offspring of some internal vitiated secretion, as acrid acid in the stomach, or bad bile, affecting the skin by supposed sym-

pathy ;—which is equally figurative language, if we are driven to close and searching analysis.*

Boils and carbuncles do not occur in healthy subjects ; and, when they happen naturally, are always looked upon as indicating a bad habit of body. The surgeon may choose other description, and call it weak and unhealthy inflammation, affecting the outward texture of the body, differently from phlegmon or true inflammation. I will not, therefore, for the sake of language, attempt to dispute the plain notion, so familiarly adopted, of the nature of crisis in the water-cure treatment ; but I do think it of great importance that it should have its sober limits, and not be made an *ignis fatuus* to the practitioner or the patient. The benefit arising from crisis must not be referred merely to the depuratory or cleansing process for the blood. Boils and rashes act as counter-irritants, in the ordinary and most accepted view, and in this way also prove useful ; on the same principle that we see advantage derived from blisters, and artificial eruptions produced by external applications, tartar emetic, croton oil, &c. ; and even the use of setons and issues is connected with this principle of counter-irritation equally with the idea of discharging the offending humor from the blood. It is very evidently the formation of an artificial disease, with the hope that it may be a substitute for the real one, and cause its removal.

It certainly happens in this way that much inconvenience must often be sustained by the patient in the pro-

* A breaking out, as it is called, on the lips and chin, would probably be produced in any one, by eating for a continuance rich sauces, especially if made with bad butter.

gress of his cure ; and he must submit to be worse, before he can be better.

The occurrence of boils is not, however, invariably necessary to the cure. Nature determines this, and may give another kind of crisis ; and even none that is notable may be the pleasing fate of some, who still receive every benefit and recover.

From all that I have seen, and my opportunity has been extensive, I am deeply impressed with the conviction that the employment of a very large amount of treatment, at one and the same time, in order to urge the circulation to produce crisis, demands most prudent consideration, and especially in irritable constitutions. I am free to admit that, in chronic cases of long standing, superficial measures would be of little or no avail, and that there must be efficient treatment. If too active measures be pursued in these exceptionable instances to which I allude, a sudden and too severe crisis might be produced, creating high suffering and possible danger. Instead of the favorably suppurating boils, such as are of untoward character might arise. I am sure that these unfavorable consequences may always be avoided by ordinary care, and do not belong to the water-cure treatment, as of right, more than any accidental untoward result belongs to the regular practice of physic.

Whenever a threatening appears of too strong a crisis, the treatment is to be immediately reduced ; and, being nicely adapted also to the particular circumstances of the case, all anxious embarrassment will be removed.

In conclusion of this subject, I advert with regret to reflections which I have seen in print on the skill of Priests-

nitz, on account of a particular case which occurred at Graefenberg, unfavorable in respect to the constitution of the patient, and having a fatal termination. In its treatment at the latter period, there had been on the part of the individual much improper deviation from the directions laid down, owing to an impatient desire of urging crisis for the sake of a more speedy cure. From this cause, fever crisis set in suddenly and with destructive violence. Continued high irritation and fatal exhaustion ensued.

A lamented event of this kind, happily most rare, should serve as occasion for such reflections as I have already suggested. No remedy that is powerful for good, can be so weak an instrument as not to be also capable of evil. Neither the skill nor the prudence of Priessnitz should be lightly called in question by any one. I am convinced that, with regular superintendence of a case, he would never provoke a crisis beyond his power of convenient control. The very large number of patients in his list, varying from two to five hundred, could not allow of watch being kept over every case, and he must be sought for rather than seek. He is most attentive on every important occasion ; and it must be the fault of the patient if he do not report progress ; and more especially if he do not seek prompt aid in the event of the least unfavorable occurrence.

Another and very important consideration presents itself on the subject of crisis ;—for how long a time is its occurrence to be viewed as an indication for the continuance of treatment ? Evidently it requires judgment to know what may be referred to the influence of the constitution not yet delivered from its errors ; and what to simple morbid action of the vessels of the skin, existing as a secondary and a lo-

cal disease. I know an instance of the occasional formation of boils on the legs, causing much inconvenience, although the general health is quite restored : the full water-cure treatment, which was carried on nearly two years, having been laid aside for one ; with the exception that the patient applies water dressings to the skin when it inflames, or to a boil ; and uses a cold bath daily.

Does Water cause Dropsy ?

Many object to the drinking of cold water, on the ground that animals only drink to quench thirst. This is true, but they do not live in our artificial state, nor are they subject to the influence of the mind. It cannot be denied that the nearer people approximate to nature, the less they need adhere to any prescribed rules ; but man resorts to water to establish his health, therefore the quantity must be increased, not only for the purpose of allaying his thirst, but to dilute, purify, and restore, in quantities which must depend upon the inconvenience or pain experienced. By this simple means, serious indispositions are often prevented. Another argument made use of against drinking cold water is, that it produces dropsy. In the first place, it is evident, that if this were true, such a complaint ought not to exist amongst us, for whoever heard of an Englishman drinking too much water ? But we affirm, on the contrary, that this disease is caused by the injudicious administration of drugs ; the use of too large a quantity of them ; by omitting to drink cold water, and by neglecting to wash or bathe the body daily in that element.

If the skin is so much relaxed that it no longer throws out those matters which daily reach it from the interior

of the body, fluids are collected underneath the skin which ought to be evaporated, and which cause inflation, paleness, and cold. This is what is called dropsy.

The more the human body is injured by drugs, the more it is in need of strong perspiration, because it endeavors, by the aid of this physical agent, to relieve itself of all diseased matter. From this it may be inferred that no persons are more in need of the cold water-cure than those who have taken too much physic. Further, strong poisons, of whatsoever nature they may be, whether mercury, blue pill, calomel, bark, or spirituous liquors, to excess, frequently cause death by dropsy ; sometimes this disease is caused by catching cold, but only those are liable to it who have produced a disposition to the complaint by relaxing the skin. The only remedy formerly known was to draw off the water by tapping, which operation, often repeated, gives a respite to life for a short time. This illness, in its infancy, may always be speedily cured by hydropathy, and, in its most advanced stages, if there be any strength left in the constitution, this disease will be eradicated by the water-cure ; it being the property of this treatment to revive the activity of the skin, and enable the latter to indulge freely in the necessary ejection of perspiration.

From the returns of the year 1841, within the city of London, and bills of mortality, amongst a people altogether opposed to the use of water, we find that from dropsy alone the deaths amounted to no less a number than 584. Any one who never takes physic nor intoxicating liquors, and keeps to a water diet, may be perfectly sure of never being attacked with dropsy.—CLARIDGE.

*Diseases to which the Water-Cure is more especially adapted.**By Dr. Johnson.*

I shall now proceed to enumerate a few of those diseased conditions of the body to which the water-cure is most especially adapted. But I would here premise that this mode of treatment, when properly modified, and carefully adapted to the peculiarities of individual constitutions, and to the nature of the disorder, can seldom fail of conferring more or less benefit, let the diseased condition be what it may. This is true from the very nature of the remedy, the effect of which is to *strengthen the general system*. And undoubtedly a certain amount of strength may, by it, be accumulated in the body, although the actual disease itself may not be eradicated. In cases where it is impossible that the disease should be cured, the general health and strength may be so much improved as to render it far more easily endured.

I must also premise, that besides those diseases which I am about to mention, as well as many others concerning which want of room must necessarily keep me silent, there are a multitude of anomalous and undenominated disorders, so entirely varied in form, character, and symptoms, that any attempt to enumerate them here is perfectly out of question—and yet many of these are unquestionably such as can be entirely removed by hydrotherapeutic treatment, upon the principles herein laid down as the foundation of that mode of cure.

Acute Diseases.

The diseases over which the water-cure is said to possess

the most rapid and striking influence, are *acute diseases*. Fevers, febrile diseases, inflammations, &c., &c.—such of them, of course, as are curable by *any* means—are said to be removed with a certainty and rapidity which is little less than magical. A fever which, under ordinary treatment, would confine the patient to his bed for six weeks or two months, is frequently overcome in *two or three days*, and the patient is thus restored to health before there has been time for the approach of that extreme weakness and emaciation so constantly the result of a long illness, even after the disease itself has been vanquished.

In all curable acute diseases, therefore, the water-cure is peculiarly and especially available.

Neuralgic or Painful Diseases.

In all painful disorders also—disorders the chief character of which is *severe and acute pain*—this treatment possesses the most extraordinary and even unaccountable powers of relief. Severe pain is a sensation almost entirely *unknown* at Graefenberg.

Indigestion.

There is a most extensive class of symptoms, manifesting themselves in various groups, in different persons, attacking almost every individual, more or less severely, and more or less frequently, throughout the whole range of the upper and middle classes; sparing neither age, sex, nor condition; undoubtedly the cause of more human suffering than any other disorder, and which class of symptoms has received the general appellation. These distressing sensations are exceedingly various, and indeed only agree among

themselves in being universally accompanied by evidences of a disordered stomach. The term indigestion is an exceedingly absurd one—inasmuch as it implies that the faulty action of the stomach is always the *cause*—whereas the faulty action of the stomach is much more frequently the *effect* of disorder in some other organ. Ignorance of this fact, (well known to medical men, however,) has led persons to do themselves infinite mischief, and actually to bring on disorder in a previously healthy stomach, by a misapplication of remedies. For instance, a man gets a head-ache and a disordered condition of the stomach, at one and the same time. He never hesitates a moment as to what he should do, but forthwith sets about physicking his unfortunate and most innocent stomach—taking it for granted that it is the disordered stomach which has produced the disordered brain ; whereas it much more frequently happens that it is the disordered brain which has produced the disordered stomach. He addresses his remedies to the wrong organ, thus doing no good to the *one* and infinite mischief to the *other*.

I believe that indigestion hardly ever (now-a-days) commences in the stomach. But the healthy functions of the stomach are continually disturbed by a distressed, irritated, fagged, worn-out condition of the brain and nervous system—from which system alone the stomach, like every other organ, must derive all its vigor. But how can the stomach derive *vigor* from the brain and nervous system, if the brain and nervous system have *no vigor themselves* ? Indigestion is almost peculiar to the upper and middle classes, and, amongst these, is nearly a *universal* disease. There must, therefore, be a universal cause for it, which cause must be

peculiar to these classes. But *excess*, either in eating or drinking, is not *now*, by any means, a *universal fault* in, nor is it peculiar to, these classes.

But there *is* a morbid cause, which *is* almost *peculiar* to the upper and middle classes, and which *is*, also, almost *universal* amongst these classes.

This cause is a morbid, undue, and excessive *excitement* of the *brain and nervous system*. And the morbid sensibility which necessarily results from this constant excess of nervous excitement I take to be by far the most frequent source of indigestion. For it must be remembered that the stomach derives its digestive powers from the eighth pair of nerves, along which nerves the nervous influence is transmitted to the stomach like electricity along the conducting wire, or steam through a tube. If this nerve be divided in a healthy dog, while digesting his meal, digestion instantly stops and becomes impossible.

Among the upper and wealthy classes, this excessive excitement is derived from artificial, and unnaturally refined, sources of pleasure. The theatre, the ball-room, music, dancing, gaming, political ambition daily disappointed, fashionable emulation perpetually on the strain—petty contentions of all sorts—late hours and luxurious habits—these, in the upper ranks, are the causes of excessive excitement—morbid sensibility—anxiety—indigestion.

In the middle classes, the *same* morbid results are obtained, by the *same* means, from sources somewhat different. And the cares of business, the anxieties of speculation, solicitude for the welfare of a numerous family, pride hourly contending with poverty, debts, doubts, dangers, and

difficulties—these do for men of the middle rank, what the causes above enumerated do for those of the upper.

Some of the more prominent features of this many-headed monster I will here enumerate. They are nausea, pain about the region of the stomach and sides, head-ache, heart-burn, a sense of fullness, distension, or weight in the stomach, a feeling as if a ball were lodged in the throat, acid or offensive eructations, flatulence, vomiting, especially of a clear liquor (like pure water), sometimes of an acid quality, and often in large quantity, a sensation of *sinking or fluttering* at the pit of the stomach, and loss of appetite ; costiveness or irregularity of the bowels, with a morbid appearance of the evacuations ; pain of the back and turbid urine ; a disagreeable taste in the mouth, especially on waking ; a feeling of stinging, or heat, as of cayenne pepper, in the mouth ; tooth-ache, palpitation, pulsation in the region of the stomach, irregularity of pulse ; short, dry cough, and occasional difficulty of breathing ; giddiness, languor, lassitude, depression of spirits, with fear of death or of impending evil.

Whenever this long train of distressing symptoms has arisen from excessive irritation of the nervous system—from morbid sensibility, without organic lesion—as it does in nineteen cases out of twenty—it can be cured, beyond question, by the hydropathic treatment—by exalting and accelerating the change of matter.

Leucorrhœa, or Fluor Albus.

This most distressing, enfeebling, and exceedingly common disease—a disease which resists almost every other mode of treatment—depending, as it does, upon chronic in-

flammation of the uterus, is well calculated to be effectually removed by the invigorating method adopted at Graefenberg, and other hydropathic establishments.

Attempts have lately been made to show that leucorrhœa depends upon an ulcerated condition of the os uteri. It is extremely probable that the os uteri may be frequently found in an ulcerated condition in females laboring under leucorrhœa, but the more probable inference is that the ulceration is the *effect*, and not the cause, of the morbid discharge—whose acrimonious nature is often fully sufficient to account for the ulcerated condition of the os uteri. Besides, supposing the ulcerated condition to be the cause of the discharge, that condition could not have come on without previous inflammation. But, whichever of these two conditions, inflammation or ulceration, be the true cause, the cold water remedy is equally well adapted to remove it—seeing that *both causes* are themselves *caused* by a *weakened condition* of the organs concerned.

Gout and Rheumatism.

The cases of rheumatism and gout which have been cured at Graefenberg, are almost without number. And when it is considered that these diseases depend upon inflammation of particular structures of the body, and that this inflammation again, in *its* turn, depends upon a *weakened* condition of the nervous system, it is sufficiently easy to account for the fact.

Epileptic Fits.

Whenever this disease depends, as it very frequently does, upon a clot of blood pressing on the brain, it is curable by

the hydropathic treatment, united to that of a *severe diet*. Besides the cases given in the list of cases in this work, I have been witness to another very remarkable one. The patient was the subject of epilepsy for four years, and the fits recurred regularly every ten days. He has not now had a fit for three months, and is about to return home perfectly cured.

Spinal Irritation.

Spinal irritation, resulting from subacute or chronic inflammation of the vertebral theca, and giving rise to a long train of the most distressing symptoms, is perfectly curable by cold water treatment.

Difficult Menstruation.

Painful, excessive, suppressed, or insufficient menstruation, is another distressing affection over which the hydropathic remedy possesses the most absolute control.

Influenza.

Of late years a vast number of persons have suffered greatly from protracted influenza ; and occasionally this disease is so obstinate as to resist all ordinary remedies. It yields most readily, however, to the Graefenberg method of cure.

Constipation, hysteria, rheumatic gout, catarrh, rheumatism of the head or of the heart, bilious head ache, sciatica, lumbago, mercurial diseases, secondary symptoms, inflammation of the kidneys, impotence, neuralgic or painful affections of the nerves—all these are completely under the control of the cold water treatment.

But my limits will not allow me to devote more space to the particular mention of individual diseases. More will be found in the list of cases.

Besides these, however, there is a whole host of anomalous, undenominated diseases, which cannot be referred to any particular class, which come within the scope of the cold-water cure. And there is probably *no disease* which cannot be benefitted, more or less, by the exaltation of the living energies, and the improvement of the general health and strength.

In fine, all those diseases depending upon functional weakness—all those depending upon nervous debility, and morbid sensibility—all those depending upon inflammation, acute, subacute, or chronic, *uncomplicated with permanent organic lesion*—all those depending upon morbid matters in the blood or other humors—these constitute that long list of diseases which are peculiarly calculated, from their nature and causes, to be removed by the hydrotherapeutic remedy.

It is not, however, to be inferred that this remedy is unable to cure *any cases* of organic lesion. On the contrary, whenever these cases are, from their nature, capable of cure *at all*, without the aid of surgical operations, the cold water treatment undoubtedly offers a better and more rational chance of success than any other—as some of the cases herein related *prove*—as, for instance, the cases of fistula, epilepsy, and paralysis.

CHAPTER VII.

THE GRAEFENBERG TREATMENT OF DISEASES.*

Gout and Rheumatism.

Gout has different names according to the part it affects. Thus it is denominated *chiragra*, when it attacks the hands ; *podagra*, when it occupies the feet ; and *gonagra*, when it is established in the knees.

It is thought to be caused by subtle fugitive acrimony, which some suppose to be a composition of lime and phosphorus, others from the acid of urine, whose acrimony traverses, with the blood, all parts of the body, and occasions dreadful pain wherever it remains. These concretions are of a calcareous nature, as is seen by the sediment of the urine of those subject to the gout, and the linen in which they perspire at Graefenberg, as they leave there traces of lime ; besides which, the boils which often ensue are critical deposits, containing the arthritic matter.

The ancient physicians called gout the daughter of Bacchus and Venus. Truly, persons devoted to these two divinities offer the greatest number of examples.

Since I followed the water-cure, I look upon medical treatment for the gout as an act of insanity. Medicine is

* This chapter is principally made up of descriptions of Priessnitz's treatment, as given by Captain Claridge, in his work on Hydropathy.

of no use in this disease, for, although it may bring some momentary relief, it is essentially hurtful, since these remedies almost always produce forced evacuations, derange the digestive organs, and favor the formation of a greater quantity of bad juices. I declare, with a perfect knowledge of cause, and a deep conviction founded on numerable and notable facts, that the sudorific process and cold water are the only means of curing this disease.

Warm and vapor baths, aided by medicinal remedies, can produce perspiration, but they are weakening, and few constitutions can bear them. The process of Cadet de Vaux may be remembered, who said that gouty people should drink forty-eight glasses of hot water daily. What did this produce? The drying up of the body by an immense loss of juices, the degradation of the most robust constitutions, and diseases worse than gout itself.

Priessnitz's method of cure unites all the advantages of the cure by warm water, without its inconveniences; like the latter, it attacks and raises the vitiated juices, and expels them from the system with advantage; it fortifies the system in hardening it, and by re-establishing the digestive functions; whilst warm water ruins them completely. In fact, the cure of Graefenberg requires only constancy and perseverance, according to the standing of the disease.

Gouty subjects, who could find no relief whatever in medicine, were those that Priessnitz cured the quickest, however violent the disease. I have heard him say that eight or ten weeks were sufficient to cure them radically; the reason of which undoubtedly is the good state of the digestive organs, unimpaired by medicine, and, consequently, a less quantity of vitiated juices.

Whatever may be the reason, it is very certain that the maintenance of the digestive organs in their normal state is that which is most important to health. It is not with emetics and purgatives, it is not with mercury, or mineral waters, of which they are so prodigal, that doctors preserve the integrity of the digestive organs ; they know this, and shut their eyes to the evil consequences of this debilitating system.

The cure of gout requires the application of the whole treatment. It should be felt on the entire system before it is particularly applied to the parts afflicted. The first object to obtain is, by the sudorific process and baths, to relieve that excessive irritability of the skin which is the source of so much pain ; adding to this, exercise in the open air. By degrees gouty subjects should leave off flannel next to the skin, which they do in summer on the fifth day of the treatment, in winter a little later, and always without the slightest inconvenience. When the invalid is not too weak, he may go immediately to the douche, which he must let fall equally upon all parts of his body ; but this must be used only for a few minutes ; it is only when he is enabled to sustain it easily, that he should expose the suffering parts to it, to put the humors which are there established in motion.

The process of strong perspiration is of the greatest importance in cases of gout, particularly for those who have tried other remedies. Whilst enveloped in a woollen blanket, the patient ought to apply bandages or umschlags to the diseased parts, and to renew them according to the process indicated : few pass more than five or six weeks under the influence of this treatment without having a crisis ; I mean

to say, without the sufferer being charged with eruptions or boils.

At the appearance of the crisis, it is necessary for the douche to be moderated, in order not to augment the crisis ; the process of perspiring ought to be mitigated, and the patient should remain a shorter period in the bath. It is often necessary to take only sitz-bath and foot-baths, particularly those subject to congestion of blood to the head, or when the gout is subject to that part. When the crisis is intense, it is sufficient to be wrapped in a wet sheet and use cold ablutions : on coming out of the sheet, it is better to avoid the use of the bath.

The treatment thus mitigated is continued, excepting where irritation approaches to danger, in which case it should be suspended, excepting the general fomentation, or bandages, which should be renewed day and night, and sitz-baths. These are sufficient to re-establish calm.

I should not forget to warn the gouty subjects, that they should, during the treatment, drink a great deal of cold water. This liquid, taken abundantly, attenuates the humors, and favors perspiration ; to which should be added as much exercise as can be taken, either by riding on horse-back, or walking. Then sawing a block of wood, or, as a case of necessity, riding in a carriage must supply its place. But if obliged to stay at home, the quantity of cold water drank should not be lessened. Further, I know an instance of gout in the head being cured by merely drinking water, and making ablutions of cold water, although the invalid was incapable of leaving his room.

There are a great many gouty people whose gout is not merely local, but is manifest in the whole of the body.

When it exists in the upper regions, foot-baths are persisted in, to draw it to the inferior extremities, not forgetting to bandage the diseased parts, in order to disturb and put it in movement ; these baths should be taken once or twice a day, for at least half an hour each time.

It is a common case to see gout affect the lower extremities ; the feet are often the seat of the disease : cold foot-baths are a quick and powerful remedy. The water for the foot-bath should not be deeper than up to the ankles, The sister of a friend of mine, residing near Toplitz, suffered a long time, pain in the foot and leg ; she tried many remedies, besides the baths of Toplitz, without the slightest benefit ; it even increased the disease to that degree that she could not walk. A violent paroxysm came on, during which she imagined the use of cold water might do her good : the first foot-bath that she took enabled her to walk : encouraged by this success she renewed it, and was in a few days completely rid of the complaint. I saw her two years after, and heard her say she had not the slightest remains of her disease.

When the gout is fixed in the hips, or any of the lower extremities, it is called sciatic gout. Sitz-baths being so efficacious, one should not be afraid on finding that they augment pain ; this betokens a movement given to the arthritic humors. This is still more increased by applying the douche to the suffering parts ; the humor at last descends to the feet, where it has been drawn by the foot-baths, which should be alternately taken with sitz-baths.

It is necessary to apply the douche strongly to the parts affected by gout, and to continually apply wet bandages, as well as to rub it very hard when in the cold

bath ; also, if practicable, with the dry hand, when wrapped up in the blanket to perspire. These frictions move and displace the morbid humors. The head is the only part which should not be subjected to the douche ; it is sufficient to apply bandages to it, particularly on the temples, where the pain is more acutely felt, and to take daily foot and sitz-baths, in order to attract the humors to the lower extremities. In this case the sudorific process should be shortened.

We will now show the treatment of tic-doloureux, which is itself a kind of gout ; we have already said that the douche should not be applied to the head. The first thing is to water the whole of the body with cold water ; if this is insufficient, a sitz-bath should be taken for two hours, a great deal of water drank, and from the sitz-bath, immediately to the foot-bath. This treatment is often sufficient to put an end to the paroxysm ; if, however, it does not cease, place a cold wet bandage round the head, and take exercise in a place where the temperature is cold. The pain got rid of, the patient should keep quiet for some days, and abstain from perspiration ; during the days of relaxation, a sitz-bath must be taken one day, and a foot-bath the next, and wet bandages frequently renewed to the afflicted parts, not forgetting to drink plenty of cold water ; it is necessary to take exercise in the open air after each bath. This is the way I treated the dreadful nervous tic which had almost reduced me to despair, and at last triumphed. I must confess that I made a firm resolution to execute all the requisite operations during the advancement of the disease. But what is not a man capable of undergoing who wishes to live ? Those

who are attacked by gout, should have immediate resource to ablutions and sitz-baths ; the paroxysm is thus always shortened, and sometimes stopped on its first appearance. This treatment is so far advantageous, that the day after, or even the same day, the patient can be exposed to the open air, without running the risk of a relapse. This is an advantage which belongs to no other treatment.

Between the paroxysms, persons afflicted with arthritic pains in the head, would do well to take head-baths, to put the gouty humor in movement, and disengage the head from it, which often happens in the shape of an abscess in the ear. Whatever pain these abscesses may cause, the head-baths and cold fomentations or bandages on the part affected, should not be neglected. Their opening causes great relief ; if they do not open, it is because the humor has been expelled by perspiration.

Head-baths should only be employed when the treatment has already affected the whole system, in order to avoid too great a reaction in the superior organs. As to the pain caused by the formation of the abscess, which is determined by the head-bath, it differs essentially from that characterizing the tic nervous ; it has much less acuteness, although it troubles the sleep for some nights ; it is more pungent than destroying, fatigues the teeth and temples, and is continually drawing towards the ear.

I shall not end this chapter on gout in the head without warning the invalid, that a strict observance of the regimen at Graefenberg is for him one of the most important duties ; any working of the mind prejudicial to the body, so shaken by the sudorific process ; the exercise of the mind would be contributed to the general state of irritation. I have already

said this process should be mitigated; I shall add, that it were better to perspire every other day. But how, it will be exclaimed, support a life of such dressing and undressing? I answer by asking, whether any other treatment is less tedious and more efficacious? There is one source from whence we may take courage; it is in the sentence pronounced by medical schools, who have declared gout an incurable disease.

All that I have said about gout and its treatment, equally applies to rheumatism, which bears such a great resemblance to it, that it is supposed to take the same origin, and often one is confounded with the other, therefore is the treatment the same; which consists in abundant perspiration, the douche, and bandages on the parts affected.

The reader will perhaps be interested to read the recital of some of the cures of gout which were performed at Graefenberg during my stay there.

A king's counsellor had suffered for six years with the gout, which, having affected different parts of the body, ended by settling in the feet, which were inflamed, and remarkably red. Foot-baths, in a hot decoction of plants, ordered by the faculty, so increased the pain, that the invalid, reduced to despair, had recourse to cold water; repeated cold foot-baths, after some days, caused the inflammation and redness to disappear. Astonished by the happy effect of cold water, he came to Graefenberg, where he submitted to the treatment. Being 65 years of age, he was obliged to proceed with great care, therefore he only perspired in the wet sheet, and did not take the douche. The remainder of the treatment was not altered; at the end of two months he went away radically cured.

A clergyman arrived at Graefenberg, who had the gout in his hands and feet to such a degree that he could not use them; fifteen days after he had commenced the treatment, boils appeared; this was a sign of the quick termination of the disease; but something important occurred to render it necessary for the invalid to return home after only six weeks' treatment; this was during the times of the crisis. He continued the cure at home; and in six weeks after his return home, was not only perfectly cured of the gout, but of an asthma, from which he had suffered a long time.

A little girl, seven years of age, suffered from the time she was one year old, with pain in the chest; after having tried medicine in vain, her parents took her to Graefenberg. Priessnitz immediately said it was rheumatism, and that he would undertake the cure: he ordered a cold wet bandage to be worn on the chest; fever was the result, and an increase of the pains. The child was wrapped in a wet sheet, which was changed several times during the day: each time that the sheet was changed, she was washed with tepid water; frightened by the fever, which continued during ten days, the parents then remembered that the doctor who had sent them to Graefenberg, said, if the treatment increases the disease, it must be discontinued immediately. They then resolved to take their child home directly. For this journey they were obliged to fetch a conveyance from some distance. During the two days they were gone, the crisis ended, and the child was so well, that on its parent's return they found it playing in the fields. The treatment persevered in for some weeks longer, perfectly re-established the little invalid's health.

A clergyman, on coming from a baptism at some distance

from home, returned with a cold, and a stomach overcharged with food. The same day he was attacked by rheumatic pains in the back and arms. No doctors being able to cure him, this state lasted for a year. He then determined to go to Graefenberg, when, after having drank, perspired, and bathed for three weeks, an eruption took place all over the body, which delivered him from pain. The continuation of the treatment cured the eruption, as well as a difficulty of breathing, which was complicated with his rheumatism.

Arthritic pains, after being endured for twenty-six years, forced a major of cavalry to leave the service. Having tried the water-cure at home, he found that it did him so much good, that he went to Graefenberg. He remained there fifteen months, when he was radically cured, and afterwards rejoined the army.

A doctor who had had sciatic gout for five years, in the left leg, which was very much swelled, and quite black, went to Graefenberg, where, after three months' treatment, such a number of boils came out, that he was no longer able to walk : after some time, these boils closed, and left the invalid in a perfect state of health.

Through a cold, taken on coming out of the theatre, a person was all at once deprived of the senses of smell and taste ; and, after a treatment of four months at Graefenberg, was perfectly restored by an abscess in the head, which opened in one ear.

Some days after my arrival at Graefenberg, a case of deafness had been cured by a similar abscess in the ear : nine months were required to cure this obstinate disease. The invalid thus cured has, in gratefulness, written a work on the method of curing at Graefenberg.

Inflammatory Fever, Nervous Fever, &c.

Inflammatory fever, as well as all kinds of acute fever, are certain to be cured by the use of cold water generally, through the medium of fomentations, viz., the wet sheet and sitz baths, renewing the one and the other, according to the malignity of the disease. Some doctors have contested the possibility of curing the nervous typhus fever with cold water. I shall answer by referring them to the writings of Doctors Curry, Reuss, Mylius, and Weigt, when they may be convinced of this truth. They will, perhaps, honor the testimony of the medical men alluded to with some credence, as those professors of medical science have cured thousands by following up the cold water system in such cases. I shall illustrate the treatment by relating two cases of this disease, which I witnessed during my stay at Graefenberg.

Soon after my arrival there, I was attacked by a strong fever. I first took a foot-bath, then a sitz-bath, wherein I remained for an hour. A friend of mine, seeing the fever augment, and my face get quite red, was frightened, and ran to Priessnitz, who came to see me at nine o'clock at night ; he immediately placed me in a wet sheet, which was renewed in half an hour. I remained in it for an hour, during which time I slept, as Priessnitz had predicted ; after which I was washed with cold water, and again placed in the wet linen, when I soon began to perspire abundantly, and to feel much relieved ; I then slept until three o'clock in the morning, when I was again washed, and replaced in the wet sheet. I then began to perspire once more, until six o'clock, when, covered with perspiration, I was plunged

into a cold water bath, where I remained but a few moments. I then went out to take a walk, and returned at eight o'clock to the breakfast table, exempt of all fever, heat, or even weakness.

I have often since seen this process employed on children attacked by strong fevers, and always with great success. It often happens that the fever is obstinate, and lasts longer than usual. The treatment should then be sustained until it has destroyed the cause of the disease.

The time which a nervous typhus fever lasts, and its pernicious consequences, are well known. What a difference is there between the results of drugs and water ! Such are the miracles performed by *Hydropathy*.

There is a case which did not occur to myself, but of which I was an eye-witness. A merchant was attacked by nervous fever and delirium. The illness began by a sensation of burning in the stomach, which soon caused sickness. He took a sitz-bath, which did him no good. As the headache and sickness augmented, he drank water until he vomited, which relieved him : nevertheless, in an hour, (ten o'clock at night,) the invalid became worse, and lost his senses. In this state he ran all over the house, with a light in his hand. From time to time his reason returned, and he was astonished to find himself thus ; but the delirium soon came on again. Thus he passed the whole night. It was only at nine o'clock the next morning that Priessnitz, hearing of the event, came to see him ; he found him in bed, his eyes staring, his mouth open, his tongue dry and burning, and totally deprived of his senses. Priessnitz immediately ordered a sitz bath, in which the patient remained for half an hour, and was rubbed with cold water. After

this, the invalid was placed in a wet sheet, which was renewed every ten minutes ; in an hour he took another sitz-bath for half an hour, and was again placed in a wet sheet. He soon began to perspire, and give evident signs of being relieved. These operations were continued until evening, when his reason returned. He slept all night. In the morning he was in a great state of perspiration, but quite free from pain. At eight o'clock in the morning, he asked for something to eat, and received bread and milk ; and for dinner he had a soup made from meat, with barley in it. The remainder of the day was passed quietly ; the second and third nights were passed nearly in the same way as the first. On the fourth day he tried to take a cold bath, but was seized with shooting pains in the head, he therefore took a tepid bath at the temperature of 61° F. This illness began on the 8th of September. On the 14th of the same month, the invalid was sent out to a dinner, at which he partook of every thing he found upon the table. A few days after this, he quitted Graefenberg perfectly cured. There had been a similar case at Graefenberg a few days before my arrival, the termination of which was equally fortunate. I was informed of this by some invalids who had preceded me. Priessnitz says, that this disease, taken in the commencement, is easily and quickly cured ; later, it requires more time. Nevertheless, whatever may have been its duration, cold water is always efficacious.

During the author's stay at Graefenberg, several other most extraordinary cases of fever occurred. One man was kept in the half bath for nine hours and a half, two other individuals were put in between forty and fifty wet sheets in the course of twenty-four hours. We need hardly add,

that success attended all these operations ; because we affirm that Priessnitz, in cases of fever, is never known to fail.

Intermitting Fever, or Ague and Fever.

This disease appears every year in the fortress of Neustadt and Cassel, in the Prussian territories ; the invalids come every year in great numbers to Priessnitz, who quickly cures them, by placing them, during the paroxysm of the fever, in a half-bath, for long or short periods, during which time they are well rubbed with cold water, until it causes them to vomit, or produces relaxation ; and a cold wet bandage is placed upon the abdomen, which produces perspiration. This is all the treatment necessary for a disease which frequently resists quinine, the specific remedy, and all the other drugs and specifics which medical men employ against it.

Dropsy.

This is one of the diseases, when of long standing, that cannot be cured at Graefenberg. When in its infancy it is curable. The treatment consists in perspiration and cold wet bandages, applied to the parts afflicted.

Cancer.

I shall doubtless astonish my readers, when I assert, that cold water is the most certain cure for cancer : this is nevertheless true. The treatment is the same as that of ulcers, with the exception of the employment of perspiration. For cancer, the invalid should perspire for a long period every day. One remarkable case which I witnessed at Graefen-

berg, was that of an invalid who had formerly suffered from a cancer in the mouth, which was cured, but the disease not eradicated. Some years after, an abscess formed on the left instep. After nine months of medical treatment, the doctors found that they could not prevent the disease entering the bone. It at length became so serious, that no other resource was left but amputation. This the invalid refused to submit to, saying he would go to Graefenberg. The doctors endeavored to dissuade him, but he persisted in his resolution, which, however, he only carried into execution after remaining nine months in the hospital, where he became a skeleton, and so weak that he could not walk a step. Three weeks after his arrival at Graefenberg, he could walk with the assistance of a stick; the ulcer alluded to cured! Another appeared on the right foot, which kept the invalid confined to his room six weeks. At length the cure was effected, and the ulcers disappeared altogether. One would scarcely believe, that a patient, who was reduced to skin and bone, should, during this treatment, become so stout, that his clothes would not fit him, notwithstanding his having perspired for some hours every day: yet such was the fact. There is nothing to fear in the cold water treatment; for although a quantity of the juices are lost by perspiration, they are more than replaced. By means of the enormous appetite possessed by all the invalids at Graefenberg, they not only gain that which they have lost, but require new strength. This is not the case with any other method of perspiration.

On the arrival of the invalid last alluded to, Priessnitz praised him for having refused to submit to amputation, which could not have cured him, the cause of his disease

being syphilis. This case required altogether nine months to cure. This is certainly a long time ; but previous to that, the invalid had passed the same time in an hospital, where, after being tortured by drugs, hot rooms, &c., his misery was rendered complete, by the doctors declaring that nothing remained but amputation.

A lady had a cancer in the breast. The disease continued to increase, in spite of all the remedies, internal and external, applied ; at last amputation was proposed, to which the invalid agreed. On seeing the instrument, she fainted ; the operation was postponed till the following day ; in the interim, some one spoke of Graefenberg, where she determined to go. After following the treatment there for six weeks, the breast became so much better, that she returned home, where Priessnitz advised her to continue the cure, which was soon crowned with complete success.

Cholera.

The treatment of this complaint depends much upon the constitution of the patient, and of the nature of the attack. The temperature of the water ought to be higher when the constitution is weak, and the sweating less. When the invalid is deprived of sense, the treatment should commence with cold clysters ; the patient, attacked with vomiting and stools, *alvines douloureuses*, should be placed in a sitz-bath of the temperature of 62°. If, at the same time, he has headache, a cold fomentation should be applied, and some one should continually rub the stomach and the abdomen, whilst another rubs the back, the arms and legs, with the hand, which should be often dipped in cold water, and this rubbing should be continued until the natural heat is established

in the skin. The patient must drink large quantities of cold water, this puts an end to the vomiting or looseness. It produces both in the case of an invalid, who is not attacked by it, and by continuing it, it causes the evacuations to cease. There is no other disease wherein it is so necessary to drink abundantly of cold water. I witnessed a case of cholera, where the patient drank thirty glasses of water in one hour. Priessnitz effected a cure in three days.

When the symptoms are abated, the patient should be placed in bed, and there rubbed continually with a dry hand, until the heat returns in the body, which should then be made to sweat well. When the perspiration appears, the invalid may be considered cured. On the re-appearance of symptoms, the same process must be resorted to. When perspiration takes place; the windows should be thrown open for any time the patient pleases; he then ought to be placed in the bath, and afterwards, if strong enough, should take exercise in the open air, and not omit to wear a bandage on the stomach continually. The use of cold water internally, is indispensable during the sudorific process, and it should also be continued afterwards.

In case the invalid be exceedingly weak, he should be kept in the most perfect repose, which tends very much to the re-establishment of exhausted strength. But if the invalid's constitution be robust, the water he uses should be quite cold, and he may fearlessly be made to perspire abundantly. The disease should be treated with the same energy when it arrives at its climax. In the first attacks of this disease, the treatment is followed by such success in so short a period, that it astonishes; but it has not the same effect when the

disease has been neglected in the beginning; however, with patience and perseverance, it is even then sure of success.

I shall finish this article by the following remarks, which I recommend to the reader's attention:—Although water was intended to be drunk, it should also be used in baths and ablutions; the fresher it is the better. Should it be necessary to raise the temperature of the water, a little hot water can be mixed with it. The cure of cholera can only be effected by re-producing perspiration; this great function cannot be animated but by rendering that energy to the organs of the skin which it had lost, and which is only gained by the irritation caused by cold water.

Water should be kept at an equal temperature to sustain this salutary irritation; care should also be taken to renew the water in the bath when it becomes heated.

When the invalid is placed in the bath, the water should just reach the navel; to obtain this height, the extremity of the bath should be raised the opposite to where the patient is seated. The thighs and legs being out of water, should be energetically rubbed to bring back the heat.

It will easily be understood, if the water of the bath were too cold, it would be dangerous; if re-action did not take place, death might ensue. The temperature of the water should, therefore, be proportioned to the remaining strength of the invalid.

The fomentation should be of a heating nature.

The ablutions should not be made longer than necessary to refresh the heated parts, as they are employed after the sudorific process; that is to say, for three or four minutes.

If the lower extremities are attacked by cramps, they should be placed in water, and well rubbed until the cramps cease.

For violent pains in the stomach, cramps in the intestines of the bowels, and frequent stools, *evacuations alvines*, alternate clysters and sitz-baths should be used.

Any one attacked by cholera should eat little, take no milk, and drink water abundantly.

The cold water treatment should be continued for a long time, as well to evacuate the injurious humors which might remain in the body, as to restore strength.

Priessnitz, in his establishment, has successively treated seventeen cases of cholera, and has cured them all in a few days. I did not myself witness these facts ; they were related to me ; but the following case took place during my stay at Graefenberg :

The inspector of a large village belonging to the crown arrived at Graefenberg ; he had been ill for six weeks, but being of a robust constitution, he had during that time resisted all symptoms of cholera, excepting sickness. He was much astonished at being ordered to drink milk, and eat bread and butter, which he did at Priessnitz's, as he placed entire reliance in him. After this repast, he returned to his room, where he found a sitz-bath, at the temperature of about 55 degrees Fahrenheit, already awaiting him. He was still more astonished, when, after some minutes, a discharge of wind greatly relieved the pains of the stomach. On leaving the bath, he went to bed, prior to which a heating bandage was placed on the stomach, and he slept until the following day. This was the first time of sleeping since the commencement of the dis-

ease. He was completely cured, and returned home quite well. To dissipate all doubts which might be raised on the nature of this disease, I shall add the recital of the invalid on his arrival at Graefenberg. "The cholera," said he, "ravaged the village which I inhabited. The inhabitants were terrified, and refused to assist the sick; they had also suspended all labor, expecting to die. Thinking it was my duty to set them an example, I visited all the sick, and touched those who were timid, to give them courage. This conduct produced the effect I had expected, but it gave me the cholera, for which I was immediately treated by a doctor of the village, but without finding any relief; from thence to Vienna, without any better success. Graefenberg was my last resource: I went, and there regained my health."

Dysentery.

Colds, and the abuse of unripe fruit, are the principal causes of this disease. It is composed of frequent evacuations of bloody glaires, accompanied with violent pains of the stomach, a burning at the anus, and spasms of the bladder; in other words, a constant desire to evacuate, without being able to render anything but glaires.

The treatment is the same as that for diarrhœa.

Obstructions of Joints.

I witnessed three of these cases whilst at Graefenberg. The first patient was a young man seventeen years of age, who was soon cured. The two others, one twenty-five, the other twenty-eight years of age, remained at Graefenberg from nine months to a year. All three owed their

disease to a fall on the knee, which was the only part affected. Neither of them could walk without a stick. They finished the cure at home.

The treatment of this disease consists exclusively of a bath for the diseased part for two hours, and the douche, which should be taken twice a day. During the bath, the leg should at times be well rubbed.

When the disease is of long standing, it is necessary to add to these two means the sudorific process. It is seldom that the cure ends without boils or abscesses breaking out on the diseased parts. The douche should then be left off, and only recommenced when they have healed. Then the diseased part should be douched for twenty or thirty minutes. As this operation would be too long for the body, the latter must be well covered and protected from the splashing of the water.

Chilblains.

Priessnitz applies heating fomentations, or bandages, to the affected parts, which soon cure them, if the complaints are recent. If they are of long standing, the invalid should perspire. It is rightly supposed that in the humors of the person there must be some vitiated juices, which are discharged by the diseased parts. This process accords with the general custom known of covering a frozen limb with snow until heat is re-established.

Habitual Coldness of the Feet.

This is remedied by taking cold foot-baths twice a day for from fifteen to twenty-five minutes, and binding them at night in a heating bandage. A great deal of exercise

should also be taken. Thus the distribution of blood returns to uniformity, and each part of the body receives its share.

Fætid Perspiration of the Feet.

This is generally relieved by foot-baths, and wearing a heating fomentation or bandage on them at night; but it is not cured without the sudorific process to purify the blood.

Inflammation of the Chest.

This disease is caused by a congestion of the blood to the lungs, soon followed by an universal want of circulation.

In this kind of disease, the first thing to be done is to refresh the blood, which is in some degree boiling, and to dissolve the obstruction and stagnation of this fluid in the affected parts. To obtain this, cold water should not be applied immediately to the affected parts. The impression of cold, adding to the already too great compression of the vessels, would increase the inflammation. The entire bath would also be hurtful, in sending the humors from the surface to the centre, and thereby overcharge the diseased member with a still greater quantity of blood.

Sitz-baths are the most certain means of allaying the inflammation, by the property which they have of refreshing the blood, and causing a strong re-action in the lower extremities, which are far removed from the diseased parts,—a re-action which takes the blood away from the afflicted organ. This operation should be effected in the following manner :

The temperature of the water for the sitz-bath should be 60° Fahrenheit, and be renewed every half-hour, until the invalid feels feverish. This fever being provoked by the water, the symptoms of which usually are trembling of the limbs, chattering of the teeth, &c., the revulsive action of the sitz-bath should be seconded by the application of wet cold bandages on the chest, which should be thoroughly covered with these wet bandages, but not re-covered with dry ones. The bandages ought to be renewed from time to time. Care should be taken to cover the other parts of the body well, in order to give free circulation to the blood. It is also requisite to rub the extremities with cold water, whilst the invalid is in the bath. The hands only should be used in this operation, taking care to keep them damp. Directly you perceive that the hands and feet of the patient are warm, you may conclude that the mass of blood is refreshed, and the circulation become healthy ; the invalid should then be placed in bed, wrapped in a sheet, the property of which is to cause an irritation, in order to promote a still stronger circulation, not forgetting, whilst the invalid is in bed, to cover the chest with a cold wet bandage, so that that part of the body may be strengthened.

When the disease is obstinate, it is sometimes necessary to renew the wet sheet and sitz-bath. Each time they are renewed, the patient must be washed in water with the chill off. During the whole of the treatment, cold water should be frequently drank, but only in small quantities at a time.

The advantages of this proceeding, which must be evident to all, are confirmed by the success which always attends the treatment of cases of this disease, which Priess-

nitz undertakes. These cures are always effected in a few days. Thus a remedy is found for a disease which has baffled all medical science.

Scrofula, Rickets.

These two diseases are also curable by Hydropathy. However, when rickettiness has entered the whole development of the body, nothing can be done by water for the distortion of the limbs. The douche is the principal instrument in this cure, with the aid of the sudorific process, energetically employed. Wrapping up in a wet sheet is highly desirable. The cold-bath should be taken twice daily; the articulation and the glands, if swollen, should be well rubbed, and bandages constantly employed. The glands of the throat and nose require frequent garglings, and sniffing water up the nose.

It has always been recommended to ricketty people, to bathe in rivers under the current of the water; as, for instance, under the water-fall of a mill. This somewhat resembles the cure at Graefenberg.

Scarlatina, Measles, Small Pox.

The fever which generally accompanies these diseases constitute their whole danger. Directly it is observed, the patient should be wrapped up in a wet sheet, there to remain day and night. If the fever is virulent, the sheet should be renewed when it becomes warm. When the invalid perspires, the entire body should be washed with water at the temperature of 61° F., that is, not quite cold, and yet not tepid. This is a certain means of moderating fever, and the heat which accompanies it. In this way, particularly

with adults, the prejudicial results of those diseases, so common in any other mode of treatment, are prevented.

It is not advisable to bathe the whole body with cold water : strong constitutions could bear it, but it is to be feared that reaction would not follow in weak persons ; if so, death would be inevitable. Fever is, as I have already said, the only danger to be feared in these diseases. It is its violence which closes the pores, and prevents the breaking out of the eruptive matter. The way to moderate it, and facilitate the eruption, is as already described, the efficacy of which is daily sanctioned by experience.

Mr. Mundé, in alluding to these maladies, says, " I will now mention three cures which, without medicine, and with nothing but cold water, I performed in my own family. The first is a case of measles in an adult ; the two others are of scarlatina in my two young children.

" My servant, 20 years of age, caught the measles. As she refused all remedies, I proposed to her, in order to quiet the fever, which was very strong, that she should be wrapped up in a wet sheet. Having agreed to this, she soon began to perspire profusely : this determined me to leave her there for seven or eight hours, she was then washed with water at the temperature of 61° F. This first perspiration was followed by abundant eruptions of red spots, which covered the whole body. I repeated the same process the next day, when the fever completely ceased. The parents having learned how I was healing their daughter, immediately came to take her home, fearing that such treatment might be attended with dangerous consequences. In twelve days the invalid came back to her service, assuring me that, whilst at home, she had taken no other remedy than cold water.

“Two of my children, one eight years old, the other five, were attacked with scarlatina; the eldest first. He was wrapped up in a wet sheet, whilst my other children, as yet unattacked, were repeatedly immersed in cold water. In three days, the one five years of age became ill; no doubt because he had previously taken the infection. The others did not take it at all. The second little invalid kept his gaiety and appetite, and was not wrapped up in a wet sheet, but only washed all over, morning and evening. The fever with both was very moderate. All was going on according to my wishes, when my wife became so alarmed as to suspend the treatment for four days. The consequence was that the fever soon redoubled its intensity, and the children were in such pain that they could not move. It was so violent at the back of the eldest’s head, that inflammation of the brain was to be feared. By my wife’s desire, who now saw the folly of her fears, I again began my treatment. This time I gave the invalid a sitz-bath, after which he was enveloped in a wet sheet, which I renewed every half hour. He soon went to sleep: this sleep lasted two hours, and gave proof of the efficacy of my proceedings, and courage to myself to go on with sitz-baths and general fomentations. The regular order of the system being re-established, I replaced the invalid in his dry bed, where he slept for several hours. In two days all danger disappeared. On the tenth day of the disease, a total scaling of the skin came on. The invalid, excepting a little weakness, was perfectly cured. The illness of the youngest was so simple that he only required ablutions. He kept his brother company during the whole of his illness. Three weeks after the commencement of this eruption, I took them out

walking in cold weather, without the walk being followed by any bad consequences. I however must add, that two days previous to exposing the new, fine, and delicate skin to the fresh air, they were bathed, morning and evening, in cold water."

Erysipelas.

This disease is often produced by an effort of nature to deliver itself of a dangerous humor of the skin. Outward impressions, also, sometimes cause it.

This complaint, which is only the reflection of an interior disease, should not be immediately subjected to cold ablutions, as that would repel the eruption which brings vitiated juices to the surface. In the ordinary treatment none but dry applications are resorted to, which are inefficacious.

At Graefenberg the use of cold water for the treatment of this disease has never been known to have unfortunate results. It is true it is not merely outwardly treated, as the entire body is subjected to the cure. The invalid should perspire in a wet sheet, drink a great deal of water, and apply heating bandages to the diseased parts. This treatment, which excludes all cold water ablutions, is always successful.

Hooping Cough, and other diseases and indispositions in Infancy and Childhood.

I believe I have already said that agitation, extreme heat, and feverish irritation in children, are remedied by the general fomentation of a wet sheet. The special irritation of the hooping cough is not so quickly cured by these means, but nevertheless it is much relieved. Care must be taken

that the water drank at first is tepid ; afterwards it should remain half an hour in the patient's room, well covered up, when it may be drank.

Inflammation of the Brain.

This disease, which is as rare with adults as it is common in infancy, either proceeds from internal causes, or from exterior injury. Its treatment only differs from that of inflammation of the chest, inasmuch as the cold fomentations on the head should be frequently renewed, as well as the wet sheet in which the invalid is wrapped. It is sometimes necessary to renew them every ten minutes. If the disease appears to get worse, the sitz-bath should be taken alternately with the wet sheet.

I shall now relate a miraculous cure which was performed by this process in the little town of Friewaldau. A laborer fell from a height, and having fractured his skull, inflammation of the brain ensued, and the invalid was entirely given up by the doctor of the place. Priessnitz visited him, and the next day he came to his senses, and, after some time, was perfectly cured.

Ophthalmia, or Inflammation of the Eyes.

Inflammation of the eyes is generally catarrhal or rheumatic, and requires the same treatment as rheumatism and gout. I never saw it acute, but always chronic.

To the rheumatic treatment, Priessnitz adds eye baths and the douche. The latter must be received in the joined hands ; from which, water coming from a height will rebound as high as the eyes. Head-baths are equally indispensable, as well as fomentations, to these organs. Chronic

ophthalmia is, of all the diseases curable at Graefenberg, the most obstinate, and that which requires the longest treatment.

A captain thus attacked, felt, after several head-baths which he continued for three quarters of an hour, a pungent pain in the head, accompanied by swelling of the ears. An abscess was expected in one of these organs, when the pain gave way to a virulent deposit, formed in the thick part of the cheek ; after this, the eyes were re-established.

Another sufferer came to Graefenberg with an exfoliation in the corner of the eye. To the whole of the treatment, Priessnitz added eye-baths ; after each of which the invalid was to look fixedly at the light, and immediately re-plunged the eyes in cold water. This man, who was perfectly blind on coming, was, on leaving Graefenberg, able to read with spectacles.

A third patient presented a very remarkable case of blindness, the results of a cold, caught during hunting, by which he lost his sight. He had been nine months blind when he arrived at Graefenberg ; after each process of perspiration, which he submitted to twice a day, the bath and the head-bath, matter, mixed with blood, came from the eyes. One might say that some pounds exuded from the eyes in the course of three weeks. I did not see the termination of this cure, before leaving Graefenberg ; but I can affirm, that the last time I spoke to the invalid, he could distinguish colors, and also objects at a certain distance.

Pain and Weakness of the Eyes.

Both these diseases give way to baths, applied to the back of the head, aided by a bandage placed over the eyes, to be

worn day and night; to eye-baths, foot and sitz-baths, &c. This treatment generally meets with success. The bandages are requisite to remove the excessive heat from the part attacked. Priessnitz has many ways of treating the eyes, which depend upon circumstances.

Itch and Ringworm.

These diseases are more easily cured by cold water, than by any other means. The process of perspiration in the wet sheet, leads to success: but ringworm is frequently more difficult to cure than the itch. It requires longer time, and a more energetic use of cold water. The douche is also indispensable in cases of ringworm, in order to bring the morbid humors to the skin. The most difficult ringworms to cure, are those which have been driven in by bad treatment. This disease is really equal to the gout in point of obstinacy, for it re-appears upon the skin after having used the douche a long time. After the process of perspiration, and cold baths too, it again shows itself under forms much more serious in their aspect, than in the beginning. We should here warn the sufferers from ring-worm, that the diet prescribed at Graefenberg must be observed in all rigor. Three men attacked with this disease, arrived at Graefenberg at the same time as myself; the first of these after several years' trial of the principal mineral waters recommended in this disease, which he had employed without success. Having followed the treatment with energy for two months, he returned home, resolved to continue the treatment mildly all through the winter; after which, he was to come again to Graefenberg, to finish the cure. At the time of his departure, he was more than half cured. The two others re-

maintained at Graefenberg, one for eight months, the other six, both leaving it radically cured. The treatment of one of these was attended by an acidity rising in the throat, and by the vomiting of matter containing chalky substances. The acidity of the throat was such that it caused the tongue to be ulcerated.

Both, after following the treatment some weeks, saw their ringworms re-appear with greater malignity and more abundant suppuration, attended by the formation of a great number of boils. Following these two cures with great attention, I was not surprised that Priessnitz insisted upon the use of strong douches, which he directed to be applied to the hips of one of these invalids; he wished a ring-worm to appear that had been there formerly. After a time, it again shewed itself, spreading as far as the knee, and looking very bad. It is but a few days since I received letters informing me that both the ringworms were radically cured.

Mercurial Diseases.

Diseases arising from the use of mercury are those which confound completely medical men. However extensive the ravages made by this poisonous drug in the system may be, the invalid has every thing to hope from Hydropathy, as no method known can be put in competition with it as an antagonist to mercury. This is a fact admitted by all doctors who have witnessed its effects.

Ulcers.

These require no other treatment than the bandages, and the sweating process, they being the principal instruments in their cure. The more ancient the disease, the more ne-

cessity is there for perspiration; ulcers cicatrize of themselves, when the mass of blood is purged of heterogeneous humors. We must not be surprised at seeing them enlarge under the influence of the bandages; if, however, this aggravation proceed too far, the bandages must be dry; all the wounds must be bathed afterwards in lukewarm water.

Syphilis.

At Graefenberg, by means of the sudorific process, Priessnitz cures syphilis in the surest and safest manner possible. I have seen it in all forms, treated and cured with more or less promptitude, according to the virulence, complication, and long standing of the disease. Previous to commencing a cure of the disease, it is necessary to counteract the effects of mercury, which most patients have taken. What shall we say to the cures which medicine affects to have performed, when, at Graefenberg, we see, in almost all the cases where invalids had supposed themselves cured years before, a return of the same symptoms in the same part? This phenomenon naturally destroys our confidence in mercurial treatment. Many persons will doubt the possibility of curing this destructive complaint by simple water, and insist upon it that mercury alone is able to contend effectually with it. May we not ask, if the cures effected by the latter agent were radical, how is it that, after many years, the disease should reappear? From this fact we conclude that mercury has the property of enveloping the syphilitic virus, rather than expelling it from the system. That mercury may remain concealed a long time, we have daily evidence in the salivation which the water-cure so often provokes at Graefenberg.

Is it not rational to think that, in the majority of pretended cures, the disease is only the more firmly fixed in the system, by this metal? Its escaping afterwards from the system, by means which we cannot always account for, leaves its prisoner at liberty, when the mercury again shews itself in the primitive forms that signalized its introduction. Whatever may be the nature of the disease, whether gonorrhœa, ulcers, chancres, buboes, &c., at Graefenberg the treatment is the same; and that is, sweating, bathing, douching, fomenting bandages, and drinking water. Gonorrhœa, with a discharge, requires the constant application of a cold fomenting bandage round the part, and injection of cold water many times a day; to this must be added the sitz-bath for an hour or two, repeated twice a day. Great attention should be paid to diet. All aliments ought to be cold.

The Gripes, Catarrh, and Cold in the Head.

To be quickly rid of these complaints, it is sufficient to perspire in a wet sheet, and then to wash the body with water of the temperature of 61 degrees of Fahrenheit, to assist perspiration. Much cold water should be drank whilst in bed. The gripes sometimes produce great heat in the head; this is appeased by means of sitz-baths, and cold wet bandages upon the head. During my own treatment, and the time I was studying the water-cure at Graefenberg, I frequently gave advice to persons attacked with these complaints: all those who followed it, avoiding physic, and living according to the diet prescribed, have applauded this method of treatment, and the promptness of the cure. For wind, and internal pains in general, take a sitz-bath, not

quite cold, but more so than tepid, for an hour twice a day, rubbing the abdomen well all the time ; to this add cold clysters once or twice a day, and wear a heating bandage round the waist.

Common Sore Throat, Stiff Neck, or Cough.

Gargle well and often with cold water, rub the throat and chest several times a day with the hand dipped in cold water ; wear a heating bandage round the neck and on the chest at night. Foot-baths and perspiration must be resorted to in obstinate cases.

Quinsy, and Inflammation of the Throat.

Priessnitz orders fomentations or bandages of very cold water round the throat ; garglings of cold water, foot-baths, and much perspiration. A person who had previously been cured of the quinsy by mercury, had a second attack of this disease. The above treatment cured her. When to the disease, strong feverish irritation is added, the invalid should be placed in the wet sheet.

Croup.

This very dangerous disease is confined mostly to childhood. Plethoric children are most liable to it. It by far oftener than otherwise arises through carelessness in allowing children to be exposed to the taking of cold, to improper diet, irregularities in meals, &c. &c. It is known by a dry, hollow, barking, whistling or stridulous cough. On first discovering the disease, probably the best thing that can be done is to give a quick tepid bath, bathing also freely the head, throat and chest. In very severe cases

this has at once apparently cut short the disease. The patient should also be wrapped without delay in a well wrung sheet, and a well wrung bandage should be put about the throat, the seat of the disease, so as, if possible, to produce perspiration. As soon as this takes place there will be great relief. Warm bricks may be placed at the feet, and about the body, to aid perspiration. Whilst the patient is in the envelopement, water drinking is not essential, unless there be thirst. If with the appearance of perspiration amendment ensue, it will not be necessary to change the applications to the throat, nor the sheets : we should rather allow the patient to remain eight or ten hours in moderate perspiration, which may be regulated by loosening or tightening the envelopement. The temperature of the apartment should be moderate. A quick ablution should always follow sweating ; after which the patient returns to a warm bed or dresses, and sits up, as is preferred. There must not be the slightest exposure to the taking of cold ; the feet especially must be kept warm.

It will often be best to again apply the wet sheet in the evening, even if the day has been passed favorably. The applications to the throat should also be renewed from time to time, as may seem necessary. Exacerbation, or increase of the disease, is most liable to occur towards midnight. In this, as in all severe and dangerous diseases, the greatest attention should be paid to diet, and the bowels should be kept free.

Pain at the Chest.

When it is rheumatism, its treatment does not differ from that of gout, which has been previously described ; rub the

part well with a wet hand, and wear a large bandage or fomentation from the neck to the stomach at night.

Sore Eyes.

Place the back of the head in cold water three times a day, ten minutes each time ; then use an eye-bath for five minutes, twice a day. After the eyes are closed in the water for about a minute, they should be opened the other four minutes. At night a heating bandage should be placed at the neck : this and the head-bath have the effect of drawing all inflammation from the front. In most cases foot-baths twice a day are highly beneficial.

Wounds.

Keep the wounded part in tepid water until it ceases bleeding, then put on a heating bandage ; when this becomes warm, put another larger one over it, so that it may extend beyond the part afflicted. If the foot is wounded, let it remain in the water for an hour twice a day, to draw out the inflammation ; then apply the bandage night and-day, but continue it up to or above the knee, in order to extend the circulation.

Nose Cold.

These colds are considered healthy, as relieving the system of some of the bad humors. To cure it, sniff cold water up the nostrils often, and wear a heating bandage on the forehead at night.

Deafness.

Rub the body all over twice a day with a cold wet cloth ;

wear a heating bandage over the ears at night, and drink plentifully of water. This process will very often relieve deafness ; but in obstinate cases, the whole treatment must be resorted to.

Ear-ache.

This disease requires the same treatment as inflammation of the eyes ; that is to say, the ears must be bandaged, and linen well wetted with cold water should be introduced into the ear ; and a similar bandage worn around the head. In case of obstinacy in the disease, the process of perspiring, and the cold water, are indispensable.

Tooth-ache.

There is nothing more simple, and at the same time more efficacious, than Priessnitz's treatment for tooth-ache. Two basins are filled with water, one of which is cold, the other tepid ; the mouth should be filled with the tepid water, and held in the mouth till it begins to be warm, then change it ; during this, the hands should be dipped constantly in cold water, and with them violently rub the whole of the face, cheeks, and behind the ears : this operation should be continued till the pain ceases. It is also good to rub the gums even until they bleed. I never saw tooth-ache resist this treatment at Graefenberg. Sometimes it is necessary to add cold foot-baths, the water not higher than the ancles.

Sprains, or Stiffness of the Joints.

If a sprain injures, or any nail runs into the foot, apply foot-baths (tepid) thrice a day for half an hour or more each time. The sprain should be well rubbed. The water

in the bath must come up a little above the part affected ; a cold bandage should be worn day and night. If the wrist is sprained or the hand wounded, elbow-baths should be resorted to, and the arm bandaged up to the shoulder : these bandages should always extend far beyond the part affected.

Fractures.

Either before or after the reduction of the fracture, there is no better means of keeping down inflammation than cold water. A cold wet bandage should be applied to the part ; this should remain an hour, and then a larger bandage must be applied to carry the inflammation away from the part. For instance, if the leg be wounded, the bandage should be carried up the whole thigh.

Piles.

It is well known that piles are caused by an accumulation of blood in the vessels which water the large intestine. These are closed or open, which means that they either let out blood, or are dry and confined to the swelling of the veins. There is also a third sort, which discharges slimy humors.

This is not a local disease. It is a visible part of a diseased state of the whole system, which is expressed by a congestion of blood to the vessels of the abdomen.

Its cure requires the most strict regimen, particularly abstinence from spices, spirituous liquors, and indigestible food. The treatment at Graefenberg, eminently cleansing and strengthening, is a radical cure for them.

When the disease is taken at its commencement, it will

give way to an easy regimen, the drinking of a great deal of cold water, fomentations on the abdomen, short sitz-baths, and a moderate sudorific process. But if the piles are already formed and running, the treatment must be more severe and of longer duration. Frequent sitz-baths, entire baths, and the douche, end by curing them. The sudorific process is indispensable to expel the prejudicial humors, which are at once the cause and effect of the disease. The use of cold water externally, without the rest of the process, would probably, by leaving the vitiated juices in the system, transform the disease into another still more serious.

At Graefenberg, I have seen blind piles open and disappear by degrees, leaving the body in a perfectly healthy state. I appeal to the testimony of all those troubled with piles, of what use are medicinal remedies?—a little relief, and never a cure. Doctors themselves are forced to admit this. Several of them, aware of what is going on at Graefenberg, recommend, and use themselves, the cold water for this disease.

Stitches in the Side.

The treatment is the same as for the foregoing disease, when the pleurisy is slight ; foot-baths, and fomentations on the affected parts, are sufficient to cure it.

Constipation.

Constipation is a prevalent inconvenience, and often becomes a disease. The causes are various ; the principal are, a sedentary life ; the bending of the body during sitting ; the hardening of the liver, the weakness or atony of

the intestinal canal: we must also add, the habit of drinking too little water. To cure it, it is necessary to take exercise, to drink a great deal of cold water, to wear a wet linen bandage on the abdomen, and two or three clysters daily—one immediately following the other, should it be requisite. Cold food should be taken instead of warm; fruit should be plentifully eaten; and care should be taken not to eat any thing greasy or heavy. When costiveness has continued for several years, add to this regimen, sitz-baths and foot-baths; douches, directed on the abdomen, correct the weakness of this part.

Inflammation of the Abdomen.

The invalid attacked with an inflammation of the abdomen, should immediately take a shallow sitz-bath, where he will remain more or less time, according to the state of the disease; the water of this bath should be tepid. On leaving the bath, he should be enveloped in a wet sheet, after having a cold bandage placed on the stomach; both should be removed about twelve times a day. Each time the bath is changed, the invalid is washed all over with cold water. In the mean time, the invalid often drinks cold water, in small quantities. If weak persons, women, or children, are thus treated, the water used for baths and washing should not be quite cold.

Weakness of the Nerves.

This disease is rarely relieved by physic, whilst at Graefenberg it is cured with certitude and promptness, whatever may be the cause. A lieutenant had his nerves in so great a state of irritation, that the least noise, the barking of a

dog, the firing off a pistol, would cause such a head-ache, that he would faint. To relieve this, he had accustomed himself to warm foot-baths. Tired of suffering, he came to Graefenberg, perspired a little, took every day two cold baths, besides head-baths and sitz-baths, as revulsive measures. This treatment was limited to three weeks, after which he continued his journey. He intended following up the cure at home. Priessnitz approved of his resolution, and advised him to walk a great deal; to ascend the hills, to ride often on horseback, in order to fortify himself, also to be enabled to bear fatigue.

Another invalid came to Graefenberg with trembling in the upper part of the body, brought on by the excessive use of spirituous liquors. He returned home, radically cured, after two months' treatment; the change from wine to water was not followed by any accident.

Hypochondria and Hysterics.

A disarrangement of the nervous system, joined to the inaction of the functions of the abdomen, cause the invalid much uneasiness and discontent. These are the characteristics of this complaint. To cure which completely, it is necessary to follow the treatment at Graefenberg. This disease being moral as well as physical, requires pure air, fine scenery, and society, a complete change in the manner of living, all of which exert a great influence upon the mind of the invalid. Whoever has lived with hypochondriacs, must have remarked the irregularity of their appetite: one day they will eat too much; the next, not at all. The first advice given by Priessnitz is to drink plentifully of cold water during meals, in order to leave space for food.

Hypochondriacs quit Graefenberg contented with themselves : the only cases that have failed were those who left too soon.

Head-ache.

Head-aches are almost always cured by foot-baths and head-baths of fifteen minutes each. First, the back of the head, and then the sides, the first for ten minutes, the latter five minutes each, should be placed in the bath, then the head should be bound up in a cold wet linen bandage, not covered by a dry one : much water should be drank to relieve the stomach, and exercise in the open air. Should the head-aches return, it will be necessary to perspire and use cold ablutions.

For perspiration, the preference should be given to the wet sheet, as it calms pain. I have seen at Graefenberg and elsewhere, violent head-aches, which had continued throughout the day, cured by a cold foot-bath of one hour, aided by abundant potions of cold water.

Tic Douloureux

Is one of those diseases given up by the doctor, as well as the invalid. Scientific men say it is caused by a disarrangement of the nervous system, whence results an increase of sensitiveness and irritability ; some, however, think it is in the humors, which contain an acrimony capable of irritating the nerves, and producing those dreadful pains which characterize this disease ; both opinions appear to have some foundation.

I nevertheless hold the first opinion to be the most reasonable, inasmuch as it is the beginning of the disease to

which the humors join their acrimony. There is, however, a tic douloureux purely nervous. On this, the cold water cure is as inefficient as every other ; but that arising from the humors is cured at Graefenberg. I speak with a perfect knowledge of this disease, having suffered for three years, and having made observations upon several who suffered from this complaint. Eight months' treatment, perseveringly followed, cured me, after trying all the remedies of physic in vain.

Bleeding at the Nose.

To stop bleeding of the nose, the throat and nape of the neck should be washed with cold water, and a cold wet linen bandage applied to the stomach ; cold foot-baths should be taken ; if necessary, take a sitz-bath, and wash the body with cold water. It is also frequently stopped by placing a wet cold bandage upon the genitals.

Indigestion, and Debility of the Stomach.

These debilities arise from intemperance in eating and drinking. The abuse of beer in Germany undermines the health of many young people for life ; then comes the irregularity in the hours of meals, the hot eatables and drinkables, artificial food seasoned with spices, the abuse of tobacco, above all, smoking after eating, and drinking beer plentifully whilst at dinner. To all these causes we must add the abuse of drugs, particularly mercury, the disease of the skin imperfectly cured, and more especially the want of ablutions, and drinking of cold water.

The first means to be adopted towards curing a deranged stomach is to avoid the causes which are here enumerated.

Substitute sobriety for intemperance, the simplicity of nature for artificial food ; neither take too much nor too little at fixed hours, preferring cold to hot, avoiding spirits of all kinds, also tea and coffee ; breakfast and sup upon cold milk, dine upon meat and vegetables, avoid all irritation of the mind ; do not wear too much clothing, which impedes circulation, and to this mode of living add much exercise in the open air, wash, and drink water.

These rules adopted, a stimulating fomentation to cover the abdomen and lower part of the stomach should be worn. The patient must sweat lightly in the morning, and take the cold-bath immediately after ; in the evening take a sitz-bath, and during the whole time, all parts of the stomach and abdomen should be rubbed with wet hands. If you can procure the douche, so much the better, but you must avoid receiving it on the stomach. If a douche cannot be procured, then the body can be sprinkled with cold water, beginning with the shoulders, and causing the water to descend to the abdomen. To these means add the drinking of cold water, taking care not to drink too much at a time, particularly at meals ; the best time for drinking water is before breakfast. Take a good deal of exercise, but moderate it in the evening, and avoid too great heat.

I saw an invalid arrive at Graefenberg, who had taken a considerable quantity of mercury ; he had for several years felt pains in the stomach, accompanied by violent headaches ; each returned every twelve hours, and deprived him of all his faculties, more particularly his digestion. He had tried medicine in vain, without obtaining the slightest relief. He was completely cured at Graefenberg, not only of his pains,

and of his bad digestion, but his system was purified by sweating out the mercury with which it was saturated, which no doubt was the origin of his disease. His treatment was what I have described.

Heartburn.

The habit of eating too much, the use of greasy food difficult of digestion, and too sedentary a life, are generally the causes of this disease.

It is combated with success by drinking water early in the morning until you produce vomiting or even diarrhœa, then the disease gives way quickly if it is not an old one ; if it is, it becomes chronic, and must be treated by sweating baths and ablutions.

The burning liquid which arises from the stomach to the throat, is often caused at Graefenberg by the abundance of greasy food with which the table is supplied. At the period of the crisis, it frequently makes its appearance, at the termination of humors, of which part is discharged by the first causes. I was sharply attacked by it at this period of the treatment, and a diarrhœa, which I brought on by gorging myself with cold water during two days, completely cured me.

Loss of Sleep.

Sobriety at table, a great deal of exercise in the open air, and ablutions with cold water, are the most efficacious remedies for this kind of inconvenience. The ablutions should be made in the morning, and on going to bed. Sleeplessness in children is invariably cured by the application of the wet sheet.

Epilepsy.

Priessnitz does not undertake to cure this disease. He merely thinks that cold baths and cold water, drank in abundance, would somewhat relieve it.

Diseases of the Abdomen.

All diseases of the abdomen, by whatever name they may be called, are cured at Graefenberg. They are in general the result of congestion, empatement, and obstructions of the organs which they confine, and of their weakness, which to dissolve and strengthen are the great objects to be attained, and for this the method adopted by Priessnitz is admirably calculated, with the aid of water, air, exercise, and diet. At Graefenberg, I met with a vast number of invalids, who for many years had not been able to obtain any evacuations, except by the power of art; these Priessnitz invariably relieved in less than a fortnight; no doubt the new mode of living contributed very powerfully to it, and we cannot too often repeat the necessity which exists in this complaint of adhering strictly to the rules of diet, which are to take in the morning and evening cold milk—to abstain from all hot aliments, and to avoid all spirituous liquors and spices.

Diarrhoea.

When the diarrhoea is recent, it is sufficient to drink cold water, to wear a fomentation on the stomach, and only to use food easy of digestion. Diarrhoea is very often the work of nature, to carry off prejudicial humors, which you must not prevent; if, on the contrary, it is chronic, accompanied by weakness, Priessnitz's method is marvellously

calculated to effect the cure. The sitz-baths are here particularly beneficial ; they ought to be repeated three or four times a day, for half an hour each time. It is necessary to drink an abundance of cold water, and to use cold water injections, eat little, take no exercise, and it is still better to keep in bed. During the time that I was at Graefenberg, I saw an invalid arrive who had a diarrhœa for six weeks, which had reduced him to a consumption. Priessnitz cured it in the course of a few days. In the chapter on cholera, there are chronic diarrhœas, where the abundant evacuations of the glaires are alternate with constipation ; they are confined by a deep weakness of the intestines ; here cold injections are a great relief. These diarrhœas are only to be cured by a long use of cold water, which will finally establish, and give a proper tone to the organs of the abdomen.

Nausea and Sickness.

At Graefenberg, nausea and sickness, as well as dizziness, are frequently produced, as the effects of the treatment. Nothing is used but a great deal of cold water as a beverage, until these symptoms disappear ; a relapse, though repeated several times, requires no other remedy : to this is added, a strict abstinence from indigestible aliments, and great repose of mind and body. When nausea and sickness are a disease essential to the stomach, the whole treatment at Graefenberg is indispensable. The sudorific process and half-baths are of remarkable efficacy.

Colics.

These always give way to sitz-baths, fomentations, or

bandages on the abdomen, clysters, and cold water abundantly drank, even when of a rheumatic nature. Fomentations, if the patient desire, should be made very hot.

Congestions of Blood.

Congestions of blood are generally to the head, and begin after meals, or hot and stimulating beverages, as well as after any extraordinary excitement. Persons subject to this complaint should abstain from either drink or food of a stimulating nature, eat moderately, drink a great deal of water at table, take a little exercise after meals, avoid all violent discussions, as well as physical or moral excitement; all occupations of the mind, immediately after meals, are hurtful. They must add to this regimen the use of cold water, as a beverage, also clysters and sitz-baths, where they should remain at least from half an hour to an hour, not forgetting to put cold wet bandages on the head. Cold wet bandages should often be repeated on the diseased parts, to strengthen the inactive vessels, and give a tone to the weakened organs. Often a foot-bath and cold bandages are sufficient to cure the head. The cure of this disease is effected without the sudorific process, which would cause an overflow of blood to the head.

Drowsiness.

Drowsiness, which is subject to frequent returns, is often caused by bad digestion, particularly from overcharging the stomach. This is remedied by moderation in eating and drinking. On its appearance, a cold bandage should be applied on the abdomen; two clysters of cold water should be

taken daily, and much cold water drank, particularly in the morning. Entire baths, ablutions of the whole body, as head-baths, should be resorted to, after which the head should be well dried and rubbed. It is well to repeat the head-bath and friction on going to bed. After meals, instead of remaining at home, exercise should be taken, which prevents sleepiness.

Sickness, and Spitting of Blood.

The bleeding of these organs can happen to those suffering with piles. Sitz-baths should be taken, and cold bandages worn at night on the chest. All kinds of irritation should be avoided, and entire repose of the mind and body observed. An abundant drinking of cold water is indispensable. Bleeding of the lungs, the effect of pulmonary consumption, is not curable by cold water. It is unnecessary to add, that great sobriety and abstinence from all heating beverages should accompany this treatment.

Hæmorrhage, Uterine.

In hæmorrhages of the matrix apply cold bandages to the abdomen, and if these are not sufficient, cold water must be injected into the matrix : to these means must be added an abundant drinking of cold water. This treatment requires the advice of some Hydropathic practitioner.

Irregular Menstruation.

Order is established in this important function, by slight perspirations, general cold ablutions, sitz-baths, and foot-baths, much exercise, and plentifully drinking cold water.

Instances of cures of this complaint at Graefenberg are innumerable.

Accouchement.

Experience has demonstrated the utility of cold ablutions, and exercise in the plain air, to females who are *enceinte*; to this ought to be added simple diet, and the drinking plentifully of cold water: wine, coffee, and liquors should be avoided. Madame Priessnitz is accustomed, during the last six weeks previous to her accouchement, to take a cold bath every day. To this she owes the happiness of a prompt and easy accouchement, and her speedy establishment in health.

Cramps of the Stomach.

Cramp in the stomach is almost always produced by faults of regimen; yet it is sometimes occasioned by the diseases of the skin being driven in, or through some organic fault of the stomach. This defect is generally cancerous, and leaves little hope of cure.

Persons attacked with cramp in the stomach ought to use cold food, wear constantly a fomenting bandage on the stomach, perspire every day, take two or three sitz-baths, and drink abundantly of cold water, particularly whilst in pain, carefully avoiding warm drinks, and all reflections which would lead to melancholy.

A counsellor, who had suffered during fourteen years from violent cramps in the stomach, was ordered, during the paroxysm, to drink cold water until it caused vomiting; the pains were for the time augmented, but they returned no more.

Tetanus.

This affection is denoted by an involuntary and continued spasmodic contraction of the muscles of the head, throat, and neck, or of the trunk, and of the extremities. The spine and neck become rigid, the head is bent backwards, and to these symptoms are added giddiness, dimness of sight, difficulty of breathing, palpitation, and spasm of the stomach. The intervals between the paroxysms vary. During the attack, the patient's body is rigid, and stretched out in a straight direction, or drawn backwards or forwards, or to either side. The rigidity is attended with violent pain; the countenance is pale, and covered with cold perspiration, whilst the rest of the body retains its natural heat; respiration is difficult, speech is impaired, and consciousness is partially or completely lost. These exacerbations generally continue for a few minutes—in rare cases during half an hour. The attacks then cease, leaving a dull sensation in the limbs for a length of time.

Tetanus is generally complicated with other diseases, the most frequent causes are, wounds implicating nerves and tendons, lacerations and contusions, fractures, injuries, in which a foreign body remains in the wound, colds, potent poisons, suppressed hæmorrhage, loss of fluids, concussion of the brain or spinal chord, and violent mental emotions.

In the treatment of tetanus, our attention must be directed towards the removal of the primary disease, if, indeed, the tetanus be not idiopathic. If we succeed in curing the original affection, the spasmodic contractions will generally cease. Foreign bodies must be removed from the system, suppressed affections should be reproduced.

During an exacerbation, little or nothing can be done. Cold affusion, half-baths, and friction, are the only remedies which we can call to our assistance. After having adopted one of these processes, we must convey the patient to bed, and endeavor to bring on perspiration by sufficient covering. The intervals between the exacerbations must be employed in enveloping the patients in wet sheets. The patient should perspire but slightly, and perform an ablution afterwards with cold water. The quantity of cold water taken internally must depend upon the constitution of the individual, but the potations should be as copious as possible; in addition to this treatment, we may rub the body frequently, and apply warm bandages to parts chiefly affected with spasm. Every mode of applying cold water which is attended with loss of time is injurious; the shorter the time required for the application, and the more frequently it can be repeated, the more beneficial will be its action. In obstinate cases, we may resort to cold plunging-baths, cold affusion, and even to the douche; but the body must become thoroughly warm before we repeat any one of these applications. The douche and friction should be chiefly directed to the spine. Half-baths are of essential service for the relief of spasmodic contraction; but the temperature of the water must be at 64° to 73° Fahrenheit. As long as the patient is in the bath, he must be rubbed by two persons continually, whilst water of the same temperature is to be poured over him. Where an injury is the cause of tetanus, the wound must be kept moist with wet bandages, applied, if possible, in the course of the nerves implicated.

—WEISS.

Lock-Jaw.

Lock-jaw is brought on by the same causes as the former disease, and requires the same treatment. Where children are affected with lock-jaw, we must never forget to inquire into the cause, which may be, gastric irritation, produced by acidity, worms, &c. Where we have detected a cause of this nature, we should endeavor, as soon as the spasmodic contractions cease, to purge the body by clysters, by copious potations, and bandages round the abdomen. The patients must observe a rigid diet, eat little, drink cold water copiously, and pass much of their time in the open air.—
WEISS.

Delirium Tremens.

Where this disease is ushered in by premonitory symptoms, they will be observed to consist of loss of appetite, loss of sleep, confusion of ideas, and general debility. The accession generally presents itself with delirium. The patients are prepossessed by one idea, of which they cannot divest their imagination. For the most part, they believe themselves to be pursued by men or animals, or by creations of their own imagination. They fancy themselves attacked, especially at night-time,—hence their inclination to leap out of bed. The majority of the superficial muscles of the body are in constant motion ; sleep is totally lost ; the countenance is pale ; the eyes are bright, and vacantly fixed ; the tongue is moist ; the skin hot, and covered with a clammy, fetid perspiration ; the region of the liver and stomach is swelled ; there is slight thirst, and the action of the bowels is disturbed.

This disease is, generally speaking, of short duration ; an attack may extend to ten or eighteen days, and is brought on by the immoderate indulgence in the use of brandy and other spirituous liquors.

The chief point in the treatment, is to purge the alimentary canal by copious water-drinking. If vomiting ensue, it must be encouraged by perseverance in the use of cold water internally ; where there is no vomiting, we must produce purging by the use of clysters and bandages round the abdomen. When the alimentary canal is thoroughly cleared, we should wrap the patient in wet sheets, and apply at the same time cold bandages to his head repeatedly. The patient should remain in the envelopement until diaphoresis ensues. The sooner perspiration appears, the oftener the sheets may be changed ; but five or six repetitions in the course of the day should suffice, for, by changing the sheets very often, too much heat will be abstracted from the body. Immediately after the first envelopement, the patient must be subjected to an ablution with cold water and conveyed to bed, if he feel exhausted. The bed should be kept clean and well aired. Where there is considerable determination to the head, as the continuance of delirium will indicate, it will become necessary to persevere with the cooling bandages to the head ; warming bandages to the abdomen afford also great relief in these cases. To prevent the patient from escaping, the doors and windows must be well fastened ; for if we attempt to restrain him by coercion, his state will be rendered worse ; we must, therefore, snatch those moments when the patient feels most composed in the early stage of the disease, for the use of the envelopement.

These patients are very quickly brought to their senses by a judicious use of cold water. At first, they are certainly much exhausted, but fall asleep the sooner, and sleep must be regarded as the true crisis. The longer the patients sleep, the sooner they will recover ; they occasionally continue in this state for twenty or thirty hours without once waking ; nor should their rest be interrupted if they do not wake for a longer period, as this proceeding would certainly prove injurious.

I have frequently succeeded in curing this affection in a very short time, within twenty-four or forty-eight hours. Our chief endeavor should be to wean the patient of the baneful habit of intemperance, which is not an easy task. We must keep these patients at least during one year under very strict surveillance, and firmly deny them the use of all intoxicating liquors, and totally disregard their representations and entreaties. Exhortations, earnest representations, and reproaches, seldom suffice to keep drunkards from their unmanly, immoral propensities ; they will frequently entreat us, on their knees, to indulge them in their habit for once, promising at the same time to abstain during the remainder of their lives from drinking ; but be not misled by these idle phrases ; for if we listen to them once—but once accede to their wishes—they will become more impetuous in their requests, and where prayers are of no avail, they will resort to threats. We must remain firm and unmoved, nor should we rest until we have totally crushed their vicious propensity. It is for this purpose necessary that we should have the drunkard in our command, or we shall not succeed. He must never have money at his disposal, or be trusted with the management of his own af-

fairs; for he will sell and pawn every thing to gratify the ruling passion.—WEISS.

Paralysis.

“This term implies a loss of the power of motion in the muscles of the whole body, or in single parts; a state, therefore, differing materially from loss of motion in consequence of stiffness, distortion, or ankylosis of joints.

Total paralysis deprives the whole body of sensation; partial paralysis is of more frequent occurrence—*e. g.* paralysis of one side, (*hemiplegia*;) or of the upper, or more frequently of the lower extremities, (*paraplegia*.) Paralysis is occasionally confined to single organs, as to the lungs, the rectum, the bladder, &c.; it sometimes comes on suddenly, at other times gradually and insidiously; in the latter case, a sensation of frigidity, numbness, formication, and tremor, is experienced in the part threatened with an attack. A paralysed limb is cold, flabby, emaciated, or anasarcaous.

The predisposition to paralysis is denoted by a certain debility, diminished irritability, checked or suppressed vitality of certain parts. The exciting causes are, diseases or injuries which diminish or destroy the power of motion. Pressure on the cerebral and spinal nerves will produce paralysis, which always results when these nerves are injured, or pressed upon by accumulations of blood or other fluids, or are violently stretched or lacerated, in cases of *exostoses*, or of curvature of the spine. The nervous influence is moreover weakened, or totally destroyed by various other injurious impressions; by loss of blood, effusion on nervous matter, by loss of semen, want of food,

diarrhœa, the use of various drugs, exposure to the poisonous vapors of lead, mercury, arsenic, &c.

Paralysis is frequently incurable, or the cure is at least attended with difficulty. Hydrotherapeutic treatment may be resorted to with some chance of success as long as an occasional sensation of itching or pain is yet perceptible in the paralysed limb, or a slight degree of mobility still exists in the part affected. The paralysed patient must be wrapped every morning in the wet sheet, and should remain in that position until he is thoroughly warm ; the envelopement must be followed by an ablution. Where the patients are not too weak, they may perspire in the envelopement every third day ; they must also wear warming bandages on the parts affected, where this proceeding is practicable. A wave-bath, (in a river,) if possible, should be taken every other day, and alternate with a douche. The action of these baths will be greatly increased if we have the patients well rubbed with horse-hair gloves for a few minutes before the bath.

In cases where the bladder or rectum are affected, cold sitting baths and cold clysters are indicated in addition to the douche. Where douche cannot be obtained, cold affusion must be resorted to, the stream of water being directed to the parts affected. The treatment in paralysis should tend to excite and invigorate ; cold water, therefore, must be used at short periods, but frequently. Our chief endeavor must be to increase the action of the skin ; hence, the patients should not be debilitated by sweating, nor by the use of derivative baths ; but we must endeavor to strengthen them by friction and cold ablutions. Where

the skin is dry or brittle, this inconvenience is to be met by the envelopement in the wet sheet.

The internal use of cold water must depend upon the constitution of the patients ; but they should drink as much as possible, excepting the paralysis affect the urinary organs, which would be debilitated to a greater extent by the water, If, in the course of this treatment, an eruption present itself on the part affected, or if we observe its temperature to increase, or reaction, or even exhalation, to have taken place, these will be very favorable symptoms, and should excite the patient to persevere with the treatment, as considerable relief may be thence expected. In every thing that relates to diet the patients must conscientiously perform their part ; they should take much exercise in the open air, avoid excesses of every description, and confine themselves to mild, nutritious food.—WEISS.

Apoplexy.

This disease is denoted by a sudden loss of consciousness, sensation, and voluntary motion. Apoplexy is generally sudden in its attacks : if it be attended by precursors, they will be—head-ache, giddiness, a red bloated countenance, violent pulsation of the temporal and carotid arteries, stammering, nausea, spasmodic contractions of the muscles of the face, an irregular pulse, uneasy sensations at the back of the neck, and great anxiety.

In an attack of apoplexy, the patients fall suddenly, and are senseless ; the breathing is difficult, and stentorous ; the mouth is covered with foam ; the pulse and beat of the heart continue, but unequally ; the eyes are prominent and fixed ;

the countenance is covered with cold perspiration ; the hands and feet are cold.

Death may ensue in a few minutes after an attack, or in a few hours, or it may be delayed for two or three days : the disease may, however, terminate in perfect recovery, leaving paralysis, sometimes of the half of the body (*hemiplegia*,) but more frequently of single limbs or organs ; or disturbance of the mind, and general debility, may also be its sequences.

Plethoric, robust persons, with a large head, and short, thick neck, are predisposed to apoplexy. The disease occurs most frequently between the fortieth and sixtieth year of life, and is brought on, or favored, by the following exciting causes : inflammation of important viscera, of the brain in particular ; nervous diseases ; lesions of the heart or large blood vessels, causing disturbances of the circulation ; debilitating, depressing passions ; considerable loss of blood, and other fluids.

The treatment of this dangerous disease is no easy task for the most experienced physician ; the non-professional reader should, therefore, never venture to undertake the treatment. Where medical aid cannot be immediately obtained, the following rules should be observed : in the first place, all the wearing apparel must be removed, and the patient must be placed in the sitting posture ; a few buckets of cold water should then be poured over him, whilst several persons rub his body continually. If vomiting ensue, it must be encouraged, by administering to him at first tepid, and subsequently cold water. Clysters should be immediately used. When the patient is somewhat restored, he must be enveloped in the wet sheets, to perspire. The sheets should

not be closely adapted to the body, least of all confine the neck. The patient must lie almost in the sitting posture in bed, and requires careful watching, that we may be able to afford him the necessary assistance in case of another attack. With the second accession, he must be immediately removed from the sheets, and subjected again to friction and affusion. If the desired perspiration appear, it should be encouraged, if possible, for some time, and we must administer cold water to the patient, provided he can swallow. When the patient is removed from the envelopement, every thing should be in readiness for a rapid ablution, in order that we may return him quickly to bed, and cover him well up ; for it is imperatively necessary to keep up the action of the skin. If the patient improve considerably with this treatment, we may repeat it every twenty-four hours until he is able to leave his bed. The envelopement in the wet sheet must be subsequently continued once daily ; the patient, however, need not perspire, but should merely remain in the sheets until he becomes warm. Where the skin is very dry and brittle, and evinces but little activity, the patient must sweat again every third or fourth day ; and the parts chiefly affected must be covered with warming bandages, rubbed, and frequently washed with cold water. If the parts do not acquire their perfect activity by these proceedings, the douche must be brought into application, and the whole of the treatment necessary in paralysis.—WEISS.

Fainting.

“Fainting is a well-known malady, denoted by a certain diminution or total suspension of consciousness, sensation,

motion, respiration, and circulation. A severe form of fainting, the total suspension of all the evidences of vitality, but where life continues, is called suspended animation, (*asphyxia*,) in common parlance "a trance." Fainting is sometimes preceded by weariness, a disordered head, vertigo, dimness of sight, palpitation, nausea, anxiety, and palor of countenance.

The duration of a fainting fit is, generally speaking, confined to a few minutes; the patient then recovers with sighing, the passage of flatus, with vomiting, or evacuation of the bowels, and the warmth of the body and the color of the countenance then gradually return.

Hysterical or hypochondriacal persons, and patients suffering from congestions, are most subject to fainting.

The first point in the treatment of syncope, is to remove all articles of clothing which confine the body, as tight cravats, waistbands, and garters. The patient must then be placed in the sitting posture, and sprinkled or washed with cold water, until the fit is over. To diminish the predisposition to fainting, the body should be washed daily with cold water, and the patient should drink nothing but pure cold water, avoiding all warm narcotic beverages, and should, further, take much exercise in the open air. Clysters are likewise indicated.—WEISS.

Apparent Death.

This is distinguished from actual death, by the absence of symptoms of decomposition; of the cadaverous odor and of the blue or green spots on the skin. Persons, apparently dead, frequently retain consciousness, feeling, and especially the sense of hearing, for several days; but they

are totally incapable of moving or of giving other signs of life.

The causes of *asphyxia* are various, viz., exposure to deleterious gases, carbonic acid gas, the air in sewers and cellars, where new fermenting wines are deposited, difficult parturition, constriction of the air passages ; it is also the effect of continued violent cold, &c.

The first attention must be paid, in the treatment of the half-dead, to the removal of all wearing apparel, and to procure them pure fresh air, especially in summer time. Our next proceeding must be to pour cold water upon them occasionally from a certain height ; they should then be well rubbed and brushed by several persons, the pit of the stomach and the soles of the feet more particularly : we may also endeavor to inflate the lungs, and use clysters. Where all these attempts are fruitless, we may tickle the fauces with a feather, and try a warm bath, especially in cases of hanging, strangulation, and of drowning.—WEISS.

Torpor from Cold.

Persons in a state of torpor from cold should be laid on snow in a moderately cold place, and the whole body should be covered with snow ; and where this is not to be obtained, they should be immersed in cold water, leaving the mouth and nose only free ; in this bath the patients must remain until symptoms of life are observed. They are then to be conveyed to an unwarmed bed, and the whole body must be rubbed with flannel, but cautiously, to avoid injury to the skin. When animation returns, cold water must be administered to the patients until they can assist themselves to drink. Frozen limbs, or parts affected by frost, should

be treated with snow or cold water, and with foot and hand-baths; bandages and ablutions may also be brought into operation. Where open sores or ulcerations are observed, we must use water of a higher temperature, to heal them.—WEISS.

Hydrophobia.

Priessnitz has cured this disease in dogs. The animals are tied fast, and then doused repeatedly. The paroxysms are at first increased, but soon the symptoms abate. The animals are then kept warm by coverings.

A very respectable gentleman of this city, (New-York,) a druggist, informs the writer that he has frequently cured the disease in dogs, by having the animals fast, and dashing water upon them, and particularly upon the head. It was his opinion that as soon as water entered the stomach, the animal grew better. He had not had an opportunity of testing the remedy, except in cases in which the disease had come on spontaneously.

Scalds and Burns.

Scalds and burns differ by being caused in different ways, the former being always the effect of heat applied through the medium of a fluid. A scald is generally more diffused in extent and more equable in severity than a burn.

The most useful division of burns, is the very ancient one, that of three kinds : 1st, those causing mere redness or inflammation ; 2d, those causing vesication or blistering ; 3d, those causing actual death or destruction of the part.

1. The first class are attended with mere superficial inflammation and are not at all dangerous. They are, how-

ever, sometimes very painful. Homeopathically, that is, on the principle that like cures its like, the treatment is to be by hot applications, holding the part to the fire, &c. &c. Hydropathically, cold is to be constantly applied until the inflammation subsides. Allopathically they are treated according to the fancy of the practitioner. The application of cold water is the best means we know of—the most comfortable as well as the most effectual. There is not the slightest danger of taking cold, which some fear so much, as long as cold is agreeable. Nor is it true, as has been so generally believed, “that although the application of cold was most pleasurable, and continued to be so as long as it was employed unremittingly, still that if it were discontinued for a moment the pain returned with infinitely greater force.”

2. From what we have seen, we doubt whether blistering would ever be caused if the part could be suddenly immersed in very cold water and there kept, provided this is done before the blister is raised. When blistering has been caused, it is well to draw off the fluid collected. This is best done by piercing under the blister through the live skin a little way from the part; smarting is thus prevented. The elasticity of the live skin causes the hole to close, and air, the cause of smarting, is thus excluded. If there is need of any further treatment, wet cloths covered with dry ones, continued according to the feelings of comfort, are the local applications to be used. Large blisters will of course need treatment. The wet bandages should be so arranged and kept constantly wet, that the *air* is entirely excluded.

3. The third class of burns, those in which the part is

destroyed, are sometimes exceedingly troublesome and dangerous. When of considerable extent, the constitutional symptoms are severe—those of collapse, or great prostration of strength, coldness of extremities, quick and feeble pulse, paleness of surface, repeated and violent shiverings and severe sensations of cold. These symptoms are sometimes soon succeeded by difficult breathing, coma, or sleep-like insensibility, from which with difficulty only the sufferer can be aroused, and finally with death. In other cases, dissolution is preceded by a kind of imperfect reaction, or a general feverish excitement in the system, attended with delirium and distress.

Burns of apparently small severity, when extending over a large surface, should always be considered dangerous—they are really so, and more particularly, if the skin has been removed. Of equal extent, burns on the extremities are always less dangerous than those upon the body. Infancy and old age are the periods most unfavorable. When burns are extensive, and there is little or no apparent suffering, this must be reckoned as indicative of most urgent peril. Severe pain, comparatively, is a favorable symptom ; yet this may prove a symptom of danger, since it may so exhaust the vital powers, that death will be the result. “The early subsidence of complaint, unwillingness to be disturbed, apathy approaching to stupor, as if the scale of sensibility had sunk below the point of pain, is invariably a fatal symptom. Constant shivering is an ill omen. The failure of the pulse and the consequent coldness of the extremities, with a livid hue of the transparent skin of the cheeks and lips from congestion (accumulation of blood) in the capillaries, drowsiness, with occasional muscular twitch-

ings, are sure prognostics of death." The subsidence of swelling is likewise a most unfavorable symptom.

The treatment of severe burns, of the second and third classes, requires great skill and good judgment on the part of the physician, and patience and perseverance on the part of patients and nurses. Good nursing has been said to be the best part of "doctoring." If there is collapse, coldness of extremities and shiverings, certainly we must husband to the greatest possible extent what little of heat and strength the sufferer yet has, and excite healthfully the vital organs to action. If we understand the capabilities of the human system, this is not best done by diffusible stimulants, as hot brandy and water, ether, ammonia or harts-horn. In common practice these are the first things resorted to. If the patient lives at all, he lives in spite of these remedies, if they are used. Warm applications, as heated bricks, or bottles of warm water, are often made to the arm pits, between the thighs, and to the feet. These are good, but the best part at which to apply warmth, so as to cause it to be diffused through the body quickly and generally, is the "pit of the stomach;" and this is the best done by *bladders* of warm water. The other applications mentioned should be used if no better can be had. Next to the pit of the stomach, warm applications to the feet are probably best; but, if necessary, applications can be made to all of the parts mentioned. The wrapping the whole body also in an abundance of warm clothes should by no means be neglected. Of this we shall speak hereafter.

To allay *vomiting*, which sometimes takes place in great collapse, it has been common to give a large dose of calomel and opium, or to give an opiate clyster. But these

agents though they often arrest vomiting, do a great amount of mischief. Pure, soft water, taken, if necessary, little by little, as much as the patient can bear, is a far better means. Hiccup, which sometimes occurs in such cases, and is severe and troublesome, is more effectually arrested by free drinking of water than by any other means. Both in vomiting and hiccup, rubbing briskly the surface of the body with a wet towel and then also with a dry one, is good in connection with the drinking.

In cases of great collapse or sinking of the powers of life, whether caused by heat or cold or other injuries, a very ancient remedy has, from time to time, been recommended and resorted to. It is, in principle and effect, a good one, —we mean the application of the warm skin of a recently slain animal, the skin being taken off immediately after the animal is killed and then applied. Persons, too, have been placed in a carcass from which the entrails were quickly removed, the carcass being yet warm. The soothing and vivifying effect of the warmth and moisture in such treatment is most astonishing. All the good effect thus caused, with little inconvenience, can be readily obtained by means of the wet sheet or cloths wrung out of water as warm as can be borne, and applied in the ordinary way, with the warm non-conducting blankets wrapped closely outside the wet cloths. All suitably arranged, the warmth of the cloths and the warmth of the body, which is always generated and passes off as long as life remains, will be retained by the woolen blankets, and thus thrown back upon the body, which, together with the moisture, produces a most soothing effect over the *whole* body, the same as that of a warm poultice upon any *part* of the body. The great surgeon,

Baron Larry, saw the warming remedy by means of the warm skins, used with great benefit, by certain humane Esquimaux, upon a company of Frenchmen who had been shipwrecked, and who were suffering greatly with cold and fatigue and hunger, and himself afterwards put the same remedy in practice with good success, in the case of a distinguished Marshall, during one of Napoleon's Spanish campaigns.

If in any such case of sinking, the best remedial means fail, and death takes place, still such means should be most industriously used. Life will be at least prolonged, pain will be rendered by far less severe, and death, to which all must submit, will be rendered less violent. It will thus be more like the gradual dying away of embers than like the sudden extinction of a fire. Indeed, the writer has so much confidence in the application of warmth and moisture to soothe the system and relieve pain, that he believes that in all cases, if the means are rightly used, however violent the disease, death will take place, comparatively only like the sinking into a quiet sleep, almost without a struggle or a groan.

But to return : in these cases of severe scalds and burns there is sometimes, also, a feverish excitement or general fever throughout the whole system, attended with great restlessness and pain. To reduce the pain, most persons would at once say, "a good dose of opium, or some of its preparations, must be given without delay." But still among the best medical authorities, there is discrepancy of opinion concerning the effects of opium. Larry, of whom Bonaparte said that he was the most humane man he ever

saw, says, "Opium is injurious, whether used internally or externally. Externally, it stupifies the parts, instead of exciting them to a salutary inflammation; internally, if used in considerable quantity, it enfeebles all the organs, after producing a momentary stimulation." Another writer of considerable note, Travers, says, "In small doses it is ineffectual, and in large ones injurious." But how are we to proceed? The pain should be quickly removed. Pain should ever be regarded as the truthful admonition of nature, that something must be done—it should be removed. To personify, nature is attempting to accomplish the object, but asks assistance at our hand. In these cases, then, *locally*, we must use the wet cloths of temperature to suit the feelings; constitutionally, we must resort to wet sheets, clysters, drinking, &c., as in any similar case of general fever. As in all inflammatory cases, the greatest caution is necessary in diet. By the use of clysters the bowels should be kept freely open.

The ulcers resulting from burns are often very slow in healing. It is also not uncommon for a second inflammation to be set up by exposure to cold or cold moisture: a cold is taken in the burn, as it is said. People are in general too careless and inconsiderate when once the pain has ceased. The ulcer following a burn should be guarded, and the greatest care should be exercised that it be not exposed. It should be moist and comfortable, and the part of equable temperature. No possible application will cause it to heal as quickly as water, rightly applied.

It is best not to remove the dressing very quickly in case of a running ulcer. The part can easily be kept moist and agreeable by removing only the outward dry covering, and

with a soft sponge, the part can be wet according to the feelings of comfort.

Most serious deformities are sometimes caused by scalds and burns. A limb may become obstinately bent ; large and unsightly scars may be formed, and sometimes the chin may become fixed to the breast, and the eyelids become incapable of closing. These difficulties have often been augmented by the patient being allowed too full a diet. This, it is often believed, is necessary to support the strength under the weakening effect of the profuse discharges that often take place. The diet should be mild and unstimulating, and what would be termed low.

If the fingers or toes are badly scalded or burned, and the skin removed, care must be taken they do not adhere and grow together. Lint, or better, very fine cloths, will suffice to prevent an accident of this kind.

Flour frequently sifted upon the surface of the running ulcers, as also very finely carded cotton perpetually strewed upon the part, is a favorite remedy with some. The good effect of these substances is to exclude the air, to form a covering, and to maintain the part at an equable temperature. These applications are certainly good in many respects, yet they are apt to become dry, hard, and irritating, and are sometimes converted into a loathsome mass of putridity and worms. A liniment of linseed oil and lime water, or the soap liniment, have frequently been used. White paint is dangerous. Properly managed, we like pure clean water the best. In no case is skill and good judgment more needed than in scalds and burns.—*Water-Cure Journal, New-York, 1845.*

Consumption.

The foundation of this most formidable disease is usually laid before birth. It is admitted on all hands that it is seldom cured. There are, however, exceptions to this rule. Just as ulcers heal in any part of the body, so they sometimes do in the lungs. As yet, comparatively but little has been attempted in the treatment of this disease by means of water-cure. Priessnitz has had all that he could do with more favorable cases than those in consumption. To a person in an advanced stage of this disease he would say something to this effect, "You cannot expect to be cured by any means ; but by the proper use of water, with suitable attention to air, exercise, clothing, and diet, you can be much benefitted. Your life can be prolonged, and rendered more comfortable."

Dr. Billing, senior physician to the London Hospital, a man of experience, second to few, if any, in speaking of consumption, says, "Some years ago, a gentleman by the name of Stewart adopted a rational mode of treatment, with which he had considerable success ; but because he could not work miracles, his plan was unjustly depreciated. His method was entirely tonic, and *especially the cautious use of cold and tepid ablutions of the skin*, a modification of cold bathing—a remedy which is found *so universally beneficial in promoting the resolution (cure) of strumous (scrofulous) tumors.*"

"One thing of which I am convinced," says Dr. B., "is, that the true principle of treating *consumption* is to support the patient's strength to the utmost." This can best be done by water-cure. All will agree that the means used

in the treatment by water are very powerful to promote strength, if the patient can bear such treatment. But the treatment, we contend, can be managed with perfect safety, even to the last hour of life ; *and will always positively do some good, and no harm*, when rightly used, which is more than any one can claim for drugs. The action of drugs is always doubtful, and sometimes dangerous, and every dose, however small, acts only by virtue of its power to produce diseased action in the body. Furthermore, the indication of treatment is the same in all cases of the disease in question, and for all others that are not unfrequently mistaken for it ; that is, to support the strength to the greatest possible degree. It is true, different cases always have different symptoms, so that the treatment must be varied accordingly ; but it is the right way to support the strength by all possible means, so that the system may be better able to resist the disease.

In the early stages of this disease, much can be done by way of preventing an increase of its symptoms. All the daily and hourly circumstances which go to affect the health should be most scrupulously attended to. The strictest regularity and correctness in meals, bathing, exercise in pure air, sleep, &c., &c., if rigidly observed, will be found to prove highly salutary. But all this requires knowledge possessed by few. It is very common for persons in this disease to be greatly injured by the food they take. Even in the advanced stage of the disease, persons are told that die they must, and that it matters little what kind of food they take. It is not uncommon to find persons in the far advanced stages of this disease indulging freely in the use of rich pastry, and toast well saturated with butter, one of

the worst dishes that well persons even can take, and all this is done because the patient has a good appetite, and because the *stomach* does not *appear* to suffer. The disease is concentrated upon and spends its violence in the lungs, so that the stomach cannot feel the injuries it receives ; but the lungs and whole body suffer just as much from such improprieties, as if the stomach or any other important part was the seat of disease. In food, *we must always make the weak part the standard of what the system can bear.*

In this disease, as in all others, we believe it better that the patient take no animal food, other than preparations of milk, or cream, which is generally better and less feverish ; and these, even, in many cases, it is believed, are better omitted ; for they are more feverish and exciting than the mild preparations of farinaceous food.

In the more advanced stages of this disease, the early morning sweats, which are so weakening, can be much mitigated, if not entirely prevented, by judicious sponging, or wet cloth rubbing the surface of the body. The hectic fever, which wears down the patient's strength, can also be much relieved. By bandaging and the wet sheets to soothe, great good can also be done to the last.

Pregnancy and Child-bearing.

The success of Water-Cure under the direction of Priessnitz, is as remarkable in pregnancy and childbearing as in fever, Priessnitz never having lost a case in either condition.

During pregnancy the sitz-bath and abreibung are frequently applied, particularly the former, if there be pain in the back ; cold and tepid baths (which are really in effect

only milder cold baths,) are recommended, and the wet bandage, he considers, lessens the first pains, and causes a speedy labor. After confinement, he recommends the body to be rubbed all over daily, portion by portion, with a wet towel, and then with a dry one; the rest of the body being kept well covered. In milk fever, he directs a slight sweating, with subsequent wet towel.

For pain in the breast or bowels, wet bandages are applied. If the limbs swell, bandages are also used to the parts affected. If there be giddiness or head-ache, bandages are applied to the head. Wet sheets are also efficacious.

Priessnitz's Treatment of Infants.

"If the stomach or bowels are deranged, he applies a soft wet bandage, or places it in slightly warmed water to the waist; the bowels being gently rubbed; or a clyster of cold or tepid water is administered.

"When teething comes on, and fever prevails, the well-wrung bandage should be applied as a small shawl across the shoulders and chest, to be renewed when it becomes hot. Great care must be taken that this bandage is perfectly covered, or injury will arise.

"In all feverish complaints of children, the wet sheet is perfectly safe, renewed when it becomes too warm; and afterwards the tepid bath; the child being kept as much as possible in bed.

"This treatment applies to measles, small-pox, scarlet fever, &c. as I have had many opportunities of testing."

CHAPTER VIII.

THE MORE ANCIENT USES OF WATER.

HIPPOCRATES, the great father of medicine, "the old man of Cos," who lived to about 90 years of age, we are told was accustomed to use water in his treatment of many of the most serious diseases. He observed, that it was the general nature of warm water to produce a chill, while cold water produced warmth. His method of effecting a sweat was exceedingly simple, and at the same time most effectual ; far more so even than those modes of stimulating and rasping the internal organs by means of drugs. His plan, as we have seen elsewhere, was to pour water over the body, and then to place sufficient warm clothes upon the patient, so that the desired effect was produced. In a work which he wrote on Air, Water, and Situation, when about to speak of water, he says, "Let us see which are good and which bad ; it is a point on which health mainly depends." He considered water the best drink. He laid down as an important law, that a bath enfeebles, every time that its heat exceeds that of the body immersed in it. The truth of this Hippocratic precept has often been verified. He said that the affusion of water cures-cramp, convulsions, and tetanus ; that the gout was to be cured by a large affusion of cold water ; for it was certain, holding the foot a long time in it, abates the swelling, redness, and pain.

Galen, who lived in the second century, and who, next to Hippocrates, was called prince of the Greek physicians, said that he had cured many cases of burning continued fever, by giving his patients nothing but cold water to drink, and that not one of his patients died who had recourse to this simple remedy sufficiently early. He had seen many cured of a severe pain in the stomach in a single day, by drinking cold water. He also recommended cold bathing in fevers, and to persons in health, for fleshy ones, and those that use due exercise. According to his directions, the body was to be prepared by exercise in the gymnasium, by friction with coarse cloths, and sometimes by the prior use of the warm bath. The baths were to be taken before eating. After the bath, much friction and rubbing the surface was to be used until the skin was well warmed. He said that the duration of baths is too long, when after coming out of the bath, the body is very pale, and is not soon heated again by friction, and does not recover its natural heat and color thereby. Galen, like Hippocrates, lived to a very great age.

Celsus, a physician and philosopher, styled the Cicero of doctors, employed water for complaints of the head and stomach. He said that nothing is of so much service to the head as cold water. He recommended such as were weak in the head to plunge it into cold running water; and also in cases of weakness of sight, accompanied with a prevalent discharge from the eyes, and in enlargements of the glands. He said that slight cuts or wounds may be healed by applying sponges squeezed out, of cold water; but that in whatever way the sponges may be applied, it is only of benefit as long as it retains the moisture.

The illustrious Boerhaave recommended the use of water

to render the body firm and strong. Cold water, when limpid, light, and without smell or taste, and obtained from a clear running stream, he declared to be the best drink.

Hoffman, a cotemporary of Boerhaave, and professor of physic at Halle, and physician to the king of Prussia, wrote on the subject of water. He recommended it as the best preventive and cure of a large number of diseases. He said those who drink water, are observed to have much whiter and sounder teeth. They are brisker and more alert in all the actions both of mind and body, than such as use malt liquors. In reference to the use of mineral waters in chronic diseases, he said it was not owing to the light, sparkling air, or to the saline, or other mineral substances combined with the water, so much as to the medicinal properties of common water with which they are mixed, and which is drank in great quantities. "Water proves agreeable to persons of all ages," and "The drinking of water is serviceable in every complexion," are sayings of Hoffman. But his confidence in the power of water is best shown in the following quotation: "If there exist any thing in the world that can be called a *panacea* (a universal remedy) it is pure water; first, because it will disagree with nobody; secondly, because it is the best preservative against disease; thirdly, because it will cure agues and chronic complaints; fourthly, because it responds to all indications." By objectors to the exclusive, or nearly exclusive use of water, it is often said that water is most excellent in its place, and that it is good for a great variety of cases, and has been greatly neglected in the treatment of diseases; but that it *will not* respond to or answer all indications; that is, it cannot be made to an-

swer all the good purposes of medicines. Hoffman, all will agree, is good authority ; but the best proof of all, is actual experiment. Priessnitz, during the last 20 years, has cured diseases with greater success than any before him. His only medicine from the beginning of his accidental career, has been *pure clean water*.

Hufeland, who was also a distinguished professor, and editor of a medical journal, mentions the case of a Mr. Theden, veteran surgeon general, who ascribed his long life (more than 80 years) chiefly to the daily use of a large quantity of water, which he drank for upwards of forty years. Between his thirtieth and fortieth year, he was a most miserable hypochondriac, oppressed with the deepest melancholy, tormented with a palpitation of the heart, indigestion, &c., and fancied that he could not live six months ; but from the time he began this regimen all these symptoms disappeared, and in the latter half of his life, he enjoyed better health than before, and was perfectly free from his hypochondriac affection. He said, "The element of water is the greatest promoter of digestion ; an excellent reviver of the stomach and strengthener of the nerves, and assists all the secretions of the body, and that it purifies, not merely the skin, but freshens and exhilarates both the soul and body ; it strengthens and preserves against the changing influences of air and weather, keeps the solid parts supple and the joints pliable ; it preserves the vigor of youth and keeps up the vigor of old age. It is a powerful preventive of bile and putrefaction."

Zimmerman, the author of a well known work on Solitude, and physician to Frederick the Great, King of Prus-

sia, strongly recommended water. "Water," he said, "does not chill the ardor of genius," and then mentioned the instance of Demosthenes, whose sole drink was water.

Hahn, a German physician of note, wrote a work on the effects of water in 1738. "Water," he says, "does not, as some suppose, weaken the stomach, but on the contrary increases the appetite, as may be seen by the larger quantity of food taken at meals. Those who make this assertion contradict themselves ; for a debilitated stomach requires a less, and not a larger quantity of food. Others imagine that by drinking water they lose their color and flesh. Even if such were the case, and they did become a little paler and thinner, such a loss is not to be compared to the general improvement of health which is obtained thereby. It yet remains to be shown, whether a protuberant stomach, with swollen, flabby, puffed out cheeks, is to be preferred to a more slender shape, and a thinner face ; or whether the rude country glow of health, with rosy cheeks, is not to be preferred to that pale and sickly hue, so much admired by people of fashion. But water drinkers generally retain their flesh and healthy color. A few, however, who had swollen, flabby or spongy flesh, and therefore unhealthy, have in appearance become thinner, and lost their puffiness, having exchanged it for a firm and compact flesh, therefore healthy. Those who from the use of ardent spirits and thick glutinous beverages, as beer or brandy, have got reddened, violet, copper-colored faces, have not, by drinking water, become pale, but have exchanged their violet or purple redness for a more natural color. Every man ought, I think, to be satisfied with such a change." This writer says that perspiration, caused by cold water, is more salutary than that

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by any other known means ; and although warm water will produce perspiration, yet it chills the body much more afterwards than cold. He mentions that a physician relieved the viceroy of Sicily, Johannes de la Vega, by the use of water, and received from him as a reward, the golden cup out of which water had been drank. He said, that cold water was better to remove impurities from the skin than warm, because the warm water dries up the skin, and injures its fine vessels ; while cold strengthens it, and renders the body hard and insensible to cold, like that Scythian who went naked about the market-place of Athens to the great wonder of the people. On being questioned by one of the philosophers how he could go about naked in the cold, asked in reply, why the other did not cover his face up in winter. Upon the Athenian answering that it was accustomed to the cold, the Scythian rejoined, “ then consider my whole body as being all face.”

Hahn recommended a woman who had the itch, to get into a tub of water, and remain in it several days, to eat, drink, and sleep therein. This being attended with too much inconvenience, she washed herself several times during the day, and wrapped herself up in wet sheets during the night, and then became cured in a very short time. There was, he says, mixed with this treatment, a little superstition, as it was thought the disorder could only be cured by bathing on Good Friday. Some persons who suffered severely with this disorder, went on a Good Friday, and bathed in their under-clothes, then returned without changing or drying, went to bed, and were entirely cured. A gentleman of his acquaintance had an ulcer on his foot, which he cured by frequently bathing in a pond : and when-

ever it threatened to re-open, speedily re-established the cure by the same means. A fisherman had a large ulcerated abscess in his thigh, which had continued in spite of every remedy, for the space of two years. The fear that water would aggravate the evil, had caused him to abandon his pursuits, but the prospect of starvation compelled him again to fish. On coming out of the water after two hours, he was agreeably surprised to find the sore much less painful. This induced him to go daily into the river, and in a short time he became perfectly cured. He had ordered his patients to let their sores soak in water, as tanners do their skins, to remove their putridity, for several days and nights. Running streams were more efficacious than washing in tubs, and the more so when the patient wades against the stream, as the water thus enters and cleanses the part more effectually. He had witnessed the good effects of water in St. Anthony's Fire, which was removed in the course of a few days without the slightest injury to the skin ; whereas, on the other hand, the application of rose pink and white lead in powder, or of fat and oily pomades and plasters, impede the perspiration, increase the pain, and frequently cause ulcers. Spirituous lotions, in some measure, burn the skin, so that it peels off in large pieces ; in like manner, other applications only aggravate the disease, and render it more difficult to cure. In speaking of cancerous ulcers, he says they bear the application of cold water very well. It refreshes and cleanses them, corrects the corrosion and mitigates the pain. He had met with cases where the most bland, innocent and advisable remedies having proved irritating and painful, the patients had not only obtained great relief, but eventually were cured by cold water. He says,

in the acute diseases the fire burns with the greatest violence in the interior of the body, but as may be seen by the thermometer, the skin is also affected in a great degree. Where the fire is, there we must also quench. Cold water, though taken in large quantities, does not relieve the burning skin; but washing the body with cold water, the patient feels immediately refreshed, and scarcely are the sponges applied before instant relief is obtained. So luxurious is the sensation, that many are unwilling that this washing should be discontinued, but like the rustics Latona changed into frogs, would prefer to remain in cold water. Infants who have eruptions on different parts of the body like to be rubbed with cold water, and are by this simple remedy speedily cured. In exanthematous diseases, as small pox, measles, scarlet fever and other rashes, we may freely wash with cold water from the first to the last, during the whole course of the disease, in order to prevent the fever from becoming too violent. The skin is thus rendered more soft, so that the acrid matter can more easily pass through it. In small pox, the corrosive quality of this acrid matter is rendered milder, so that it does not eat into the skin, leaving scars behind, and very few patients who have been treated in this way, have been marked by the disease. The Africans, he says, wash all their small pox patients. A captain, having a cargo of slaves, amongst whom this disease made its appearance, treated them according to the European mode of putting the patients between two mattresses, and otherwise heaping clothes upon them, in order to bring out the disease. In great distress they cried and begged to be allowed to treat themselves according to their own mode. Being permitted, the other slaves tied ropes

round the bodies of those that were sick. and dipped them frequently during the day into the sea, drying them afterwards in the sun, and in this manner they were cured and scarcely one died. As in small pox, it is equally beneficial in measles and other rashes, and of a variety of cases he gave, scarcely any one died of measles, and in small pox not one-fourth of the number die that usually perish under the hot regimen. Out of 156 small pox patients, which a neighboring physician had treated in this way, only 8 died, although the disease raged in a virulent manner. In 1737, during the prevalence of a malignant epidemic, accompanied with *petechiæ* (small flea-bite spots occurring spontaneously, and under such circumstances, that is, in severe fevers, denoting great prostration of strength), very few died who were submitted to this treatment, although they were washed until they became very cool, even during the continued and debilitating sweats.

Speaking of certain late raging epidemics, he had frequently observed that ice, tied up in a cloth, and applied to the head, in case of inflammation of the brain, produced a most visible salutary effect, and in the course of a few hours permanently restored the intellects. He had never known a patient to die in consequence of such treatment.

Again : "those who are obliged to walk or run a great distance, by which violent or long continued action the veins of the legs become swollen, and accompanied with great fatigue, will find their pains relieved, and themselves refreshed, by taking a cold foot bath. This is made mention of in the Old Testament, and it was considered an indispensable mark of attention, to present the newly arrived guest with cold water to wash his feet."

Father Bernardo, a Sicilian Capuchin Monk, he says, performed many surprising cures in the island of Malta, in the years 1724 and 1725. His practice was to order his patients to drink iced water, and sometimes to take the same as a lavement. He kept them almost fasting for one or two months; and pursued this treatment in winter as well as summer. He cured the Grand Prior Ferretti, aged 92, when at the very point of death, giving him iced water to drink. It is stated that none of his patients perished either from starvation or otherwise. Thus by means of ice and cold water, he performed a great number of wonderful cures, in cases which had been given up by physicians, so that he was called "*the water doctor.*"

In cases of cramp, contraction, and paralysis, in addition to washing the parts with cold water, it is advisable to wash the head, and particularly the back of the neck; also to use the douche bath to the head, covered with a *sponge cap*, and the parts diseased, either exposed or covered with a cloth. The action of the water is found to produce a warmth in the skin, and penetrating deeper than the cold bath, (*i. e.* producing a more powerful reaction,) operates more quickly and effectually. A woman who had for a long time suffered pain in the back, neck, shoulders and arms, obtaining no relief from the remedies employed, at last applied to me for advice. I ordered a stream of cold water to be poured over the body, in a cool room. I had her wrapped up in sheets dipped in cold water, and which, from time to time, were renewed. She fell into a moderate perspiration, and in a few days was perfectly cured.

The father of Hahn, in his Psychrolusia, laid down the

following excellent rules for morning ablutions : " On getting out of the bed in the morning, the face and whole body should be washed with cold water, first with the naked hand, and afterwards with a sponge, pressing the water out of the sponge into the eyes and ears ; then rubbing the body dry, rinsing out the mouth, and drawing the water through the nostrils, and finishing by taking a hip bath. The trouble thus taken will be amply repaid by the agreeable sensation of warmth and freshness. Sick patients cannot do this, but the attendant should wash them over with a sponge dipped in cold water, and apply bandages, also dipped in cold water, especially to the diseased parts, suffering from heat, pain, swelling, eruptions, &c., not merely once a day, but oftener, as the greater or less intensity of the disease may require."

" A man, of 75 years of age, was seized with a violent fever, and treated in the usual way according to the hot regimen. A rash made its appearance, whilst his strength became gradually more and more exhausted. Lying constantly on his back, the skin at the lower part of the spine became inflamed and ulcerated. The patient remained in this state for six weeks, when a hardness and swelling was observed about the knees. The lower extremities had become stiff and immoveable, and the muscles shrivelled up. The stimulating treatment was now abandoned, and cooling emulsions, and water mixed with the juice of lemons and raspberries, ordered to be drank. Linen rags dipped in cold water were frequently applied to the inflamed and ulcerated parts of the back. The same were also applied to the thighs, notwithstanding the rash on the thighs and other parts of the body, and continually renewed, night

and day. After a few days, cold foot-baths were used, and moist napkins were applied to the feet. This cooling treatment gave immediate relief. The feverish heat left him, and the rash disappeared. He recovered the use of his limbs, and in three weeks was perfectly restored to health, and declared, that after this water treatment he enjoyed better health than he had done for the last 30 years."

Hahn cured many cases of insanity, by causing the patients to drink largely of cold water. Such as would not drink he chained up, and gave salt herrings to eat. By thus exciting thirst, they were caused largely to drink the water before them. One of them, who ate, for several days in succession, from eight to twelve herrings, and drank eight quarts of water, was cured in three weeks.

Of the earlier English writers upon water, we may notice Sir John Floyer, a practitioner of eminence in his day. His directions for bathing are as follows: "Not to bathe when hot and sweating (meaning no doubt the heat and sweating brought on by exercise;) not to stay in the bath over two or three minutes, or as long as the patient can easily bear it, and to go in and out immediately, on the first bathing, after an immersion of the whole body. To use the cold bath, before dinner, fasting, or else in the afternoon, towards 4 or 5 o'clock: it is dangerous to go in after great eating or drinking. To use sweating with cold bathing, in palsies and rickets, and several diseases of the nerves with obstructions." He mentions how cold water sweating was used to diminish the weight of a horse-jockey: "Dip the riders shirt into cold water, and after it is put on very wet, lap the person in very warm blankets to sweat him very violently, and he will lose a considerable weight."

This observation of Sir John Floyer reminds the author of a case he lately had, a clergyman, (to whom he is permitted to refer as to the effects of water treatment.) By great excess in mental labor, and at the same time, like the generality of mankind, taking too much food, and of improper kinds, he had brought on a complication of difficulties, particularly in the head and nervous system generally. He had also become too fat. During the first week of the treatment copious sweating, with various other means, being resorted to, he said on weighing that he lost 7 lbs. He was at the same time gaining rapidly in strength and improving in every respect.

Washing the feet, this writer says, cures corns, and the hip bath cures hæmorrhoids. His advice upon regimen was very much like that of Priessnitz : "To abstain from excess in animal food, to use much of fruits, and to drink only water : not to use hot things, high sauces, brandy, spirits, fermented liquors, salt meat, spices, tea, coffee and chocolate ; not to wear too warm clothing ; flannel renders the person very tender, and subject to the changes of weather, and too much perspiration ; not to sit much by the fire, but to take exercise in the open air, riding or walking, and that down beds are very injurious."

This writer mentions the following case : "Mrs. Watts of Leicester, went to the cold bath at London about Michælmass in 1699. She was troubled with continual vomiting and wandering pains in her limbs and head, convulsive motions or twitchings of the muscles, violent hysterical fits, colic, flatulency, sweatings, loss of appetite, an emaciated state of the body, extreme tenderness, sensibility to slight changes in the weather, chilliness, va-

pors and pains, especially in the teeth. Tonics, as bark and iron, emetics and opiates, were tried in vain. Under the advice of Dr. Baynard, she had recourse to the cold bath, and used two-and-twenty baths in the space of a month, dipping herself under water six or seven times every morning, without staying in the water any longer than the time of immersion, and went warm from her bed to the water. By this bathing, the skin became healthy, and she was not subject to colds as before. She recovered her strength and appetite and became more plump. Her weakening sweats, pains, flatulency and convulsions, ceased."

Sir John quotes another writer, Dr. Ellison of Newcastle, showing the results of people going to St. Bede's, Hanwick, or St. Mungo's wells, which were extremely cold springs. "People of all ages resorted to these two wells, for various complaints. Adults remained in a quarter, or near half of an hour, the back or other diseased parts being well rubbed all the time. They used no preparative physic. The sick went to bed immediately afterwards, and sweat for two hours or more. The healthy went in for pleasure, and immediately on coming out experienced a warmth all over, and were more nimble, and their joints more pliant.

"These springs were very celebrated for the cure of rickets in children. They were dipped in the water quickly, left only long enough for the clothes to become thoroughly wet. The children were then quickly wrapped up in warm blankets, which caused powerful perspiration. After being left a suitable time, the sweating clothes were taken off gradually, so that they cooled by degrees, and then dry clothes substituted. The children were not debarred their usual

play ; care was taken that their necks were kept warm to secure them from catching cold."

Dr. Baynard was also a writer upon the effects of water. He is quoted as having said, in view of remarkable cures done by water, which had fallen under his observation, "I always (I thank God) looked upon it as most impious, and one of the worst of wickednesses, in serious things to impose upon the living, but much more to *banter*, and hand down a falsehood to posterity—a fault (I doubt not) too many of our physic observators have been guilty of."

Among other cases of his are the following :—"A young man was seized with the rheumatism in every joint, which had become enormously swollen, and had continued for at least six weeks. He was wrapped up in flannel, and unable to move without assistance. He was therefore put in a chair, and thus let down into a bath, and brought up before three minutes were over. He was able immediately to walk up stairs, and in an hour's time walked back to his lodgings. In less than a fortnight his joints were reduced to their natural size. He fully recovered his health, and continued to follow his occupation."

A man with chronic catarrh, by accident fell to the neck into water frozen over. He went home, got warm clothes, slept soundly, and the next day was nearly free from his cough. Sir Henry Covingsby, he said, when a young man, suffered severely from the gout. He is now in his 88th year. He drinks spring water. Formerly his fingers and toes were full of chalk-stones, which had now become entirely dissolved and dissipated, and the joints were reduced to their natural size by the use of the cold bath, which the old knight was positive would cure the gout in every person.

He had been under the care of celebrated physicians for a numbness of the lower limbs when 30 years of age. All sense of heat and feeling were lost, so that nettles would not sting him, or clothes make him warm. After some years, he was still worse. Tired in mind, body, and purse, he at last resolved upon another mode of cure. He used all the cold means, and was bled once a month. He went into a cold spring water bath, at all times of the year, but commenced in the summer. The first bath blotched him, (that is, brought out an eruption,) and so more and more, every day, by pimples rising and then dying away. The pores were opened and the natural heat restored. He ever afterwards for 40 years continued his own doctor."

A learned doctor of laws informed Dr. Baynard, that being light-headed of a fever, and most intensely hot and thirsty, he got from his nurse and rushed into a horsepond, and stayed for more than half an hour. It brought him presently to his senses, and allayed both his heat and thirst. He went to bed, fell into a profound sleep, and when he awoke, (in a great sweat,) he found he was quite well, but had afterward some head-ache, which he thought proceeded from not wetting the head.

Dr. Dover of Bristol related a case of a waiter at Oxford, during the small-pox, who went into a great tub of water, and sat there at least two hours, yet recovered and did well. The servant of Sir Thomas Yarborough, during the delirium of small-pox, got from his bed and plunged into a piece of water, but was presently got out. The small-pox seemed to be struck in, but upon his going to bed the disease came out very kindly, and he safely recovered. A countryman, of Harrow-on-the-Hill, suffering from severe rheumatic and

spasmodic pains for nearly six months, lost the use of his lower extremities, so that he was unable to stand. He tried various remedies in vain, and had been salivated with mercury. He was entirely cured by cold bathing.

Dr. Baynard said. no men live so long and so healthy as the dabblers in cold water. An old fisherman said that little sleep, a cool diet, and thin clothes, were the only means to live healthy and long, and that the *water air* made him eat heartily. He had known many old watermen and fishermen, full or near a hundred; and those who worked at Witney, in Oxfordshire, at the blanket mills, carrying wet blankets in their arms, next their breasts, winter and summer, not only never catch cold, but live to an extreme old age. Dr. Baynard also related an anecdote of a countryman, who, during a discussion as to the best means of getting an appetite, said he had tried the ways proposed, but nothing was like going a-fishing, up to the chin in water for an hour or two; "that will get you a stomach I'll warrant you; nor am I dry."

Dr. Baynard received a letter from William Penn, as follows; "As I find the Indians upon the continent more incident to fevers than any other distempers, so they rarely fail to cure themselves by great sweating, and immediately plunging themselves into cold water, which they say is the only way not to catch a cold. I once saw an instance of it with divers more in company. Being upon a discovery of the back part of the country, I called upon an Indian of note, whose name was Tennoughan, the captain-general of the clans of Indians of those parts. I found him ill of a fever, his head and limbs much affected with pain, and at the same time his wife preparing a *bagnio* for him. The

bagnio resembled a large oven, into which he crept by a door on the one side, while she put several red hot stones in at a small door on the other side thereof, and then fastened the doors as closely from the air as she could. Now while he was sweating in this bagnio, his wife (for they disdain no service) was, with an axe, cutting her husband a passage into the river, (being the winter of 1683, the great frost, and the ice very thick,) in order to the immersing himself after he should come out of the bath. In less than half an hour, he was in so great a sweat, that when he came out he was as wet as if he had come out of a river, and the reek or steam of his body so thick, that it was hard to discern anybody's face that stood near him. In this condition, stark naked, (a body cloth only excepted,) he ran to the river, which was about 20 paces, and ducked himself twice or thrice therein, and so returned (passing only through his bagnio, to mitigate the immediate stroke of the cold) to his own house, perhaps 20 paces farther, and, wrapping himself in his woolen mantle, laying down at his length, near a long but gentle fire, in the middle of his wigwam or house, turning himself several times till dry, and then he rose, and fell to getting us our dinner, seeming to be as easy and as well in health as at any other time.

“I am well assured that the Indians wash their infants in cold water as soon as born, in all seasons of the year.”

An Indian cure for rheumatism is mentioned by a recent writer, in a quotation from Cox's *Columbia River*. The writer had suffered much annoyance from acute rheumatic attacks in the shoulders and knees; an old Indian proposed to relieve him if he would follow the mode of cure practised

by him in similar cases among the young warriors of his tribe. On inquiring into the method, the Indian replied it merely consisted in getting up early every morning for some weeks and plunging into the river, and leave the rest to him. This was a most chilling proposition, for the river was most firmly frozen, and an opening was to be made in the ice preparatory to each immersion. The Indian was asked if it would not do equally well to have the water taken to the bed-room. But he shook his head and replied that he was surprised that a young white chief, who ought to be wise, would ask so foolish a question. On reflecting, however, that the rheumatism was a stranger among the Indians, and that such numbers of whites were subject to it, and above all that he was 3000 miles from any professional assistance, he determined to adopt the disagreeable expedient the following morning. The Indian first made a hole in the ice, large enough to admit both, upon which he made a signal that all was ready. Enveloped in a large buffalo robe, he proceeded to the spot, threw off the robe, and both jumped into the frigid orifice together. The Indian at once set to rubbing the shoulder, back and loins, while, meantime, the hair became ornamented with icicles ; and while the lower joints were being rubbed, the face, neck and shoulders became encased with a thin covering of ice. On getting released, a blanket was rolled about the body, and the patient went quickly back to the room in which a fire had been ordered. In a few minutes there was a warm glow over the whole body. These ablutions were found so beneficial they were continued twenty-five days, at the expiration of which the old Indian was pleased to say that no more was necessary, and that he had done his duty

like a wise man. He was never after troubled with a rheumatic pain.

An old Canadian, according to the same writer, who had been laboring many years under a chronic rheumatism, asked the old Indian if he could cure him in the same way. The Indian said it was impossible, but that he would try another process. He accordingly constructed the skeleton of a hut, about four and a half feet high and three broad, in shape like a bee-hive, which he covered with deer skins. He then heated some stones in an adjoining fire, and having placed the patient inside, in a state of nudity, the hot stones were thrown in, and water poured over them. The entrance was then quickly closed, and the man kept in for some time until he begged to be released, alleging that he was nearly suffocating. On coming out he was in a state of profuse perspiration. The old Indian ordered him to be immediately enveloped in blankets and conveyed to bed. The operation was repeated several times, and although it did not effect a radical cure, the violence of the pains was so far abated, that the patient could follow his ordinary business, and enjoy his sleep in comparative ease.

These, and like applications in rheumatism, which have been mentioned, will naturally enough seem to many as extremely hazardous. In the second case of the old Indian, he knew very well that the old Canadian did not need the same treatment as in the other case, nor could he bear it. The old man could have been safely and far more benefitted by having had washings and rubbings after his sweatings, and sweating bandages applied to the diseased parts. The writer lately cured a very severe case of rheumatism, so much so that the man could scarcely move, and

was wholly confined to his bed, unless lifted out. He had been well treated according to the common practice, for nearly three months. The ninth day he was out walking with his common-sized boots, (his feet having been much swollen,) and has been well ever since.

Prof. Elliotson of the University College, London, in speaking of this disease, says, "With respect to the parts themselves, we shall find it of great use to apply cold water or cold lotions, (cold water is the best,) as long as the temperature is higher than it ought to be, and they are comfortable to the patient. There is no danger of applying cold, with these limitations. If the patient should be timid, and yet long for cold evaporating lotions, (water is the best lotion,) they may be applied tepid, as in the case of gout ; but I never saw any injury arise from cold in rheumatism, where the parts were hotter than they should be, and the patient felt hot."

Dr. Currie on Water.

One of the very best works ever written on water, is that of James Currie, M.D., F.R.S., of Liverpool, published 1797. His experiments had been more extended, and made with far more scientific precision than any other before him. They were made with great perseverance, notwithstanding the prejudice and opposition in the use of water, and with a candor that does him great honor.

His work was not intended merely for the profession ; for he says, in an introductory communication to the Rt. Hon. Sir Jos. Banks, "He had guarded against the unnecessary use of technical as well as general expressions ; that it were

better than medicine, like other branches of natural knowledge, were brought from its hiding place, and exhibited in the simplicity of science and the nakedness of truth. He had every where endeavored to make his steps so plain that they could be distinctly traced. He hoped that his work would be read by men of general science, and that it would on certain occasions prove useful where medical advice was not at hand."

"Ablution with cold water in fever, had been so long employed at the Hospital in Liverpool, and in private practice by his friends and colleagues, Dr. Brandreth and Dr. Gerhard, as well as by himself, that it had become general in Liverpool and the county of Lancaster. He had frequently exhibited the mode of practice by water to those from a distance; but a method so bold and contrary to the common prejudices, made but slow progress. The mode of operation had been misapprehended, and the proper period for using it had not been understood; and on some occasions, it having been resorted to improperly, the consequences had brought it into disrepute."

Dr. Currie commences by giving an account of some cases by his friend Dr. Wright, known as a medical writer:

"On the 1st of August, 1777, (says Dr. Wright,) I embarked in a ship bound to Liverpool, and sailed the same evening from Montego Bay. The master told me he had hired several sailors on the same day we took our departure; one of whom had been at sick quarters on shore, and was now but in a convalescent state. On the 23d of August we were in the latitude of Bermudas, and had had a very heavy gale of wind for three days, when the above-mentioned man relapsed, and had a fever, with symptoms of the greatest ma-

lignity. I attended this person often, but could not prevail with him to be removed from a dark and confined situation, to a more airy and convenient part of the ship; and as he refused medicines, and even food, he died on the eighth day of his illness.

“By my attention to the sick man I caught the contagion, and began to be indisposed on the 5th of September, and the following is a narrative of my case, extracted from notes daily marked down. I had been many years in Jamaica, but, except being somewhat relaxed by the climate, and fatigue of business, I ailed nothing when I embarked. This circumstance, however, might perhaps dispose me more readily to receive the infection.

“Sept. 5th, 6th, 7th. Small rigors now and then—a preternatural heat of the skin—a dull pain in the forehead—the pulse small and quick—a loss of appetite, but no sickness at stomach—the tongue white and slimy—little or no thirst—the belly regular—the urine pale, and rather scanty—in the night restless, with starting and delirium.

“Sept. 8th. Every symptom aggravated, with pains in the loins and lower limbs, and stiffness in the thighs and hams.

“I took a gentle vomit in the second day of this illness, and next morning a decoction of tamarinds; at bed-time, an opiate, joined with antimonial wine, but this did not procure sleep, or open the pores of the skin. No inflammatory symptoms being present, a drachm of Peruvian bark was taken every hour for six hours successively, and now and then a glass of port wine, but with no apparent benefit. When upon deck, my pains were greatly mitigated, and the colder the air the better. This circumstance, and the fail-

ure of every means I had tried, encouraged me to put in practice on myself what I had often wished to try on others, in fevers similar to my own.

“Sept. 9th. Having given the necessary directions, about three o'clock in the afternoon, I stripped off all my clothes, and threw a sea-cloak loosely about me till I got upon the deck, when the cloak also was laid aside. Three buckets full of salt water were then thrown at once on me; the shock was great, but I felt immediate relief. The head-ache and other pains instantly abated, and a fine glow and diaphoresis succeeded. Towards evening, however, the febrile symptoms threatened a return, and I had again recourse to the same method as before, with the same good effect. I now took food with an appetite, and for the first time had a sound night's rest.

“Sept. 10th. No fever, but a little uneasiness in the hams and thighs—used the cold bath twice.

“Sept. 11th. Every symptom vanished, but to prevent a relapse, I used the cold bath twice.

“Mr. Thomas Kirk, a young gentleman, passenger in the same ship, fell sick of a fever on the 9th of August. His symptoms were nearly similar to mine, and having taken some medicines without experiencing relief, he was desirous of trying the cold bath, which, with my approbation, he did on the 11th and 12th of September, and by this method was happily restored to health.”

The Doctor proceeds:

“On the 9th of Dec., 1787, a contagious fever made its appearance in the Liverpool Infirmary. For some time previously the weather had been extremely cold, and the discipline of the house, owing to causes which it is unnecessary

to mention, had been much relaxed. The intensity of the cold prevented the necessary degree of ventilation, and the regulations for the preservation of cleanliness had been in some measure neglected. These circumstances operated particularly on one of the wards of the eastern wing, employed as a lock-hospital for females, where the contagion first appeared. The fever spread rapidly, and before its progress could be arrested, sixteen persons were affected, of which two died. Of these sixteen, eight were under my care. On this occasion I used for the first time the affusion of cold water, in the manner described by Dr. Wright. It was first tried in two cases only, the one in the second, the other in the fourth day of fever. The effects corresponded exactly with those mentioned to have occurred by him in his own case ; and thus encouraged, the remedy was employed in five other cases. It was repeated daily, and of these seven patients, the whole recovered. In the eighth case, the aspersion of cold water seemed too hazardous a practice, and it was not employed. The strength of the patient was much impaired by lues, and at the time of catching the contagion, she labored under ptyalism. I was not then aware that this last circumstance formed no objection against the cold affusion, and, in a situation so critical, it was thought imprudent to use it. The usual remedies were directed for this patient, particularly bark, wine, and opium, but unsuccessfully ; she died on the sixteenth day of her disease.

“ From this time forth, I have constantly wished to employ the affusion of cold water, in every case of the low contagious fever, in which the strength was not already much exhausted ; and I have preserved a register of 153 cases in which the cure was chiefly trusted to this remedy.”

Before proceeding to explain particularly the manner in which Dr. Currie used water in fevers, he describes a fever which broke out in the 30th regiment, and the treatment adopted. It commenced about June 1st, 1792.

“Such men as were sent to the guard for misbehaviour, were confined in a dark, narrow and unventilated cell.—Several men were put there for drunkenness, and suffered to remain 24 hours. The typhus fever made its appearance among these men, and spread rapidly among the rest. The Liverpool Infirmary being full, a temporary hospital was fitted up at the fort. In two low rooms, each about 15 feet square, were 14 patients laboring under the fever. One was in the fourteenth day of the disease, two in the 12th, and the rest from the 9th to the 4th day. In every case there was cough and mucus expectoration. Those who had sustained the disease 8 days, *petechiae* on the skin, (spots resembling flea-bites, denoting great prostration). The debility was considerable from the first, and, as Dr. C. says, had been increased in several cases by bleeding, before the nature of the disease was understood. The pulse varied from 130 to 100°. The heat rose from 101 to 105° Fah. There was great pain in the head, and in several instances low delirium.

“Our first care was to clean and ventilate the rooms, which were in a high degree foul and pestilential. Our second was, to wash and clean the patients themselves. This was done by pouring sea water over the naked bodies of those who were not already greatly reduced: the whole heat was steadily above the temperature of health. In those more advanced, whose debility was great, we spong-

ed the whole surface with vinegar, a practice that, in every stage of fever, is most salutary and refreshing.

“Our next care was to stop the progress of the infection. With this view, the guard-house was first attempted to be purified by washing and ventilating, the greatest part of the furniture having been burnt or thrown into the sea. All our precautions and exertions of this kind, however, were ineffectual. The weather was wet and extremely cold for the season. The men on the guard could not be prevailed upon to remain in the open air ; and from passing the night in the infected guard-room, several of the privates took the infection. In several of these the fever ran its course, and in others it was immediately arrested by the affusion of sea water. No means having proved effectual for the purification of the guard-room, it was shut up, and a temporary shed erected in its stead. Still the contagion proceeded. On the morning of the 13th, the whole regiment was drawn up at my request, and the men examined in the ranks. Seventeen were found with the fever upon them. It was not difficult to distinguish them as they stood by their fellows. The countenance was languid—the whole appearance dejected, and the eyes had a dull red suffusion. These men were carefully separated from the rest, and subjected to the cold affusion, always repeated once and sometimes twice a day. In 15 of the number 17, the contagion was extinguished : the two went through the regular disease.

“On the same day, the commanding officer, at my request, issued an order for the whole of the remaining part of the regiment to bathe in the sea ; and for some time they were regularly mustered and marched down at high water, to plunge into the tide. These means were successful in ar-

resting the epidemic. After the 13th of June no one was attacked. In all, 58 had the disease, of which 22 went through the regular course of the fever, and in 26, the disease seemed to be cut short by the cold affusion. Of the 32, two died. Both of these were men whose constitutions were weakened, by the climate of the West Indies; both of them had been bled in the early stages of the fever: and the one of them being in the 12th, and the other in the 14th day of the disease, when I first visited them—neither was subjected to the cold affusion.”

This fever is generally termed, in popular language, the nervous fever, and when particular symptoms appear, the putrid fever. It is usually caused in situations where there is want of cleanliness, and more especially of ventilation: and when once cured, it is propagated by contagion. This is described by Dr. Currie as the common fever of England. It had usually one exacerbation, (augmentation,) and one remission or abatement in the 24 hours. The exacerbation was usually in the afternoon, and the remission towards morning. According to Dr. C., the safest and most advantageous time for the affusion of cold water, is when the exacerbation is at its height, or immediately after the declination is begun; and this had almost always led him to adopt it from 6 to 9 in the evening; but it is perfectly safe to use it at any time of the day, according to Dr. C., “*when there is no sense of chilliness present; when the heat of the surface is steadily above what is natural, and when there is no general or profuse perspiration.*”*

These rules are really so plain, that it is difficult to see

* This rule relating to perspiration, as we have seen elsewhere, relates only to that caused by too much exertion.

how any one could be at a loss in knowing how to proceed, at least safely, in the affusion of cold water in typhus fever ; and yet Dr. C.'s method has been considered as being one which required a great amount of skill, to determine when it should be used.

Dr. C. afterwards says in reference to this fever, when epidemic, " that a great number of cases occurred in which the disease was suddenly cut short by the use of the cold affusion, on the first and second day of the disease. The good results were so uniformly, so precisely similar to what had been related, that a detail of cases would be unnecessary." He says, also, " that when an epidemic is spreading, and the danger is known, patients will take the alarm on the first attack, and the power as well as the utility of such a remedy as the cold affusion, in such situations of general danger, will be easily imagined. It cannot be employed too soon, after the first attack, provided the original chill is over, and the hot stage is firmly established.

In cases in which the affusion was not employed till the third day of the fever, he had seen several instances of the same complete solution of the disease. He had even seen this take place when the remedy had been deferred till the fourth day. Some cases are given to show the effect, on the third and fourth days. " Jan. 17th, 1790, A. B. aged 19, a pupil of the infirmary, caught the infection in attending the fever ward. When I saw him, in 78 hours, the fourth day of the disease, he had all the usual symptoms, head-ache, thirst, furred tongue, pain in the back and loins, with great debility. Heat 101°, pulse 112 in the minute. A bucketful of salt water was poured over him, as usual, at noon. His heat sunk to 99°, and his pulse to 98. A profuse perspira-

tion followed, with the cessation of all his feverish symptoms. This intermission continued for several hours, during which he enjoyed some comfortable sleep, but at 5 in the afternoon, was again seized with feverish rigors, followed by heat, thirst, and head-ache, as before. An hour afterwards, the hot stage was established. Heat 100° , pulse also 100° . The same quantity of cold water was again thrown over him, with similar effects. His pulse fell immediately to 80, the minute, and became more full. The heat became natural. The following night he took 20 drops of laudanum, and slept well. On the 18th, the second day of treatment, at noon the pulse was 96 and soft, skin moist, but a little above the natural heat. The tongue a little furred, and the head ached. He also complained of thirst. The same remedy was again applied. He was greatly refreshed by it. The pulse fell to 90, the skin became cool, the thirst went off, and all the feverish symptoms vanished. On the 19th, the third day of treatment, his pulse was 88, his heat natural, the thirst and head-ache gone, and appetite improving. The ablution was repeated for the last time at 6 in the evening. On the 20th, he was farther improved. On the 21st, had some debility. On the 22d, was free from complaint. This patient, during his fever, took no medicine but an effervescing mixture, the dose of laudanum excepted. The affusion was used four times."

Another case we cite: Feb. 2d, 1792, S. C., a healthy man, 44 years of age, about 72 hours after the attack, came under treatment. Pulse 100° ; heat 104° ; other symptoms as usual, but the pain in the head and back particularly severe. Two minutes after the affusion, pulse 90° , heat 100° . The patient felt great refresh-

ment and was entirely relieved of the pain in the head and back. In the evening, however, the exacerbation of the feve^re was severe, and the head-ache returned with violence. He passed a restless night. At four in the morning the affusion was repeated by his request. At nine, a gentle perspiration, covered the surface of the body, the pulse 84, the tongue moist, the skin cool, and the pains of the head and back entirely gone. In the afternoon the fever returned, though in a less degree. The affusion was repeated the fourth time, with the same happy effects; after which there was no return of the disease.

“Thus it appeared,” says Dr. C., “that the cold affusion, used on the 3d and 4th days of fever, does not immediately produce a solution of the disease, but that it instantly abates it, and by a few repetitions brings it to a happy termination in two or three days.”

The cold affusion Dr. C. also used in intermittent fevers, and with signal success, as he had found by many repeated trials. The cold affusion was used in the hot stage of the paroxysms of intermittents, and almost always with the immediate solution of the fit. In general, however, Dr. C. depended also upon other remedies in the intermission between the paroxysms; but in some instances the succeeding paroxysm was wholly prevented by using the cold affusion, about one hour previously to the period of the expected return, and the disease wholly removed by the continuance of the practice.

According to the modern practice by water, nothing is more easy than to break up these intermittents, without the aid of any medicine other than water, together with sweating. Under the restrictions mentioned, Dr. C. always

found that in any case, however advanced the stage, that cold affusion moderated the violence of the symptoms and shortened the duration of fever.

Patients are often startled at the thought or proposal of dashing cold water over the naked body. There has been a vast deal of prejudice respecting the use of water in fevers. It has been exceedingly common to deny fever patients the use of water, and this when they most needed it. It should have been understood by all practitioners, that pure cold water is the very best, incomparably the best febrifuge in nature. How often persons given up to die, have been cured by getting at water, when it was supposed that it was the very thing to kill. It is a singular fact, that in the affusion of water, however much patients may have dreaded it, the effects are so grateful and refreshing to the sensations that they strongly desire to have it repeated.

In these experiments of Dr. Currie, he at first used fresh water, afterwards fresh water mixed with vinegar, and at last salt and water, and sometimes the water of the river Mersey, which is salt, containing about 33 per cent. of the mineral. It is now generally well known that a person can endure the effect of salt water much longer than that of fresh, at the same temperature. The reason is plain. The salt produces something of an inflammation of the skin, and where there is such inflammation there is always increased heat. The body is therefore preserved in some degree from the effects of the cold. Some barbers act according to the same principle. They wash the head with stimulating washes and forcibly brush the head, so that a partial inflammation is caused, and the part is thus protected from the action of cold, and the individual is safe, whereas, with-

out such precaution, the taking of a cold would be a sure consequence.

Among other cases, Dr. C. gives an account of the following curious accident : "It occurred," he says, "about three years ago, to Capt. S. of this port, in the Irish Channel. He sprung out of his cabin window in the height of delirium, and was upwards of twenty minutes in the water. He was taken up perfectly calm and speedily recovered."

To illustrate the power of the cold affusion in fever, where the ordinary means had failed, we cite another case from Dr. Currie. It was of a boy 8 years of age, in whom the Dr. says he was much interested. "On the 3d day, the pulse rose to 130 and 140 beats in the minute, and his heat to 106° and 107° F. His thirst was very great, and delirium commenced on the 2d day and continued without intermission. Various methods had been employed to abate the fever, and particularly to excite perspiration, but unsuccessfully. His heat was not lessened by repeatedly sponging the surface of the body with cold water and vinegar ; and after a copious bleeding, all the symptoms were as alarming as before. It seemed hazardous to repeat this operation. The patient had taken antimonials without any apparent effect, and after watching the state of the thermometer in the arm-pit for more than an hour, though the mercury had sunk a single degree in that interval, it stood at the end of the time at 106°. In this state of things we resolved on trying the cold affusion, and every thing being prepared, he was stripped naked and lifted out of bed. As we were about to throw the water upon him, it was observed that a perspiration had broken out all over him, but the heat being so great, we persisted in our purpose, and

four gallons of fresh water, at the temperature of 60° , was thrown upon him. The effects were altogether surprising. On replacing him in bed, the thermometer (the bulb in the arm-pit as before,) rose only to 98° , and the burning heat of the extremities was converted into a coolness that was rather alarming. The pulse had sunk to 90, but was full and steady. Gentle frictions were applied to the extremities, but not long continued, as the general warmth speedily returned. The heat in the trunk of the body, in about an hour, rose to 100, and the pulse 100. His delirium went entirely off; the fur on his tongue speedily disappeared, and twenty-four hours afterwards, he was found free of every complaint but debility.

This case affords something of an exception to the common directions laid down by Dr. C., in reference to performing affusion while there is perspiration. Still the heat was great, and it was for this reason that the application was safe and salutary.

It may be asked, "Did not Dr. Currie find cases of fever that he could not cure by means of water? There were cases where water as well as every thing else failed. At the same time it is important to note, he cured many persons by water, where other means wholly failed, while he did not cure any with drugs when water had failed.

In all the experiments yet noticed, Dr. C. had not attempted anything by way of the internal use of water in fevers. The use of cold water internally in burning fevers, was recommended and used by Hippocrates, Galen, Celsus, and most, if not all of the ancient authors of whom we have have any knowledge. But in more modern times, as phy-

sicians began to be more speculative, and less practical, it was argued that cold drinks were dangerous. The very learned and celebrated Boerhaave promulgated the doctrine that a lentor, a siziness or glutinous principle in the blood, was the cause of fever. This led him to insist upon warm drinks in fever, as this would be more effectual in diluting this sizzly principle in the blood than cold, notwithstanding the precepts of Hippocrates, Hoffman, &c., to the contrary. The prejudice against cold drink in fever had become very general in the time of Dr. Currie.

The wonderful effects of cold water externally applied, very naturally led the discriminating mind of Dr. C. to the consideration of its effects internally. It seemed to be a principle with Dr. C., that he would be satisfied with nothing but actual facts of experiment. Notwithstanding he came to the conclusion, that the same general rules were to be observed, in order to determine when it was safe to use cold water internally, that were to be observed in its use internally, he did not do this by reasoning from analogy alone, but from actual experiment.

Dr. C. says in reference to cold drink in fevers, "that while the different modes of applying cold water to the surface are employed, it ought also to be poured into the stomach in large quantities, when the patient's heat will permit it; and the presence of nausea and vomiting is no objection to this practice, if a chilliness of the stomach is not produced."

"The salutary effects of the cold bath, and of cold drink in fever, strongly recommend the adoption of these remedies in the plague. Morendi, a physician at Venice, observes, that some sailors at Constantinople, in the phrensy of the

plague, have thrown themselves into the sea ; and it is said that, on being taken out, they have recovered.

“ Savary, in his letters on Egypt, observes, that if heat were the source of their disorders, the *Said* would be uninhabitable. The burning fever (the *Causus* of the Greeks) is the only one it gives rise to, and to which the inhabitants are subject. They soon get rid of it by regimen, drinking a great deal of water, and bathing themselves in the river. A captain of a ship (a man of credit) having some sailors on board affected by the plague, caught the infection. ‘I felt,’ says the captain, ‘an excessive heat which made my blood boil ; my head was very soon attacked, and I perceived I had but a few moments to live. I employed the little judgment I had left to make an experiment. I stripped myself quite naked, and laid myself, for the remainder of the night, on the deck ; the copious dew that fell pierced me to the very bones ; in a few hours it rendered my respiration free and my head more composed. The agitation of my blood was calmed, and after bathing myself in sea-water, I recovered.’ ”

Dr. Currie also found the use of cold water strikingly successful in small pox. He says :

“ The singular degree of success, that on the whole attended the affusion of cold water in typhus, encouraged a trial of this remedy in some other febrile diseases. Of these the small pox seemed more particularly to invite its use. The great advantage that is experienced in this disease by the admission of cool air, seemed to point out the external use of cold water, which being a more powerful application, might be more particularly adapted to the more malignant forms of small pox. The result corresponded entirely with

my expectation. Of a number of cases in which I witnessed the happy effects of the affusion of cold water in small pox, I shall give the following only :

“In the autumn of 1794, J. J., an American gentleman in the 24th year of his age, and immediately on his landing in Liverpool, was inoculated under my care : the prevalence of the small pox rendering it imprudent to wait till the usual preparations could be gone through, or indeed till the fatigues of the voyage could be recovered. He sickened on the seventh day, and the eruptive fever was very considerable. He had a rapid and feeble pulse, a fœtid breath, with the pain in the head, back and loins. His heat rose in a few hours to 107°, and his pulse beat 119 times in the minute. I encouraged him to drink largely of cold water and lemonade, and threw three gallons of cold brine over him. He was in a high degree refreshed by it. The eruptive fever abated in every respect—an incipient delirium subsided, the pulse became slower, the heat was reduced, and tranquil sleep followed. In the course of twenty-four hours the affusion was repeated three or four different times at his own desire ; a general direction having been given him to call for it as often as the symptoms of fever returned. The eruption, though more numerous than is usual from inoculation, was of a favorable kind. There was little or no secondary fever, and he recovered rapidly.”

In Tetanus or Lock-Jaw, and other convulsive disorders, Dr. C. found cold water highly useful. The case of Charles Gardner is thus given :

“The head was pulled towards the left shoulder, the left corner of the mouth was thrown upwards, the eyes were

hollow, the countenance pale and ghastly, the face and neck bedewed with a cold sweat ; but his most distressing symptom was a violent pain under the ensiform cartilage, with a sudden interruption of his breathing every fourth or fifth inspiration, by a convulsive hiccup, accompanied by a violent contraction of the muscles of the abdomen and lower extremities. He felt on this occasion as if he had received an unexpected blow on the *scrobiculus cordis*, (pit of the stomach.) Before I saw him he had been bled, and vomited repeatedly, and had used the warm bath, not only without alleviation, but with aggravation of his complaints.

“ Opium, mercury, and the cold bath were used in succession. At first, a grain of opium every other hour, afterwards a grain every hour, and at last two grains every hour ; but he grew worse and worse during the two days this course was continued. Being no longer able to swallow the pills, on the night of the 22d February, general convulsions came on once or twice in every hour. The tincture of opium was now directed to be given, and an ounce of the quicksilver ointment to be rubbed in on each thigh. In twenty-four hours he took two ounces and a half of the tincture without sleep or alleviation of pain. The dose being increased, in the next twenty-six hours he swallowed *five ounces and a half* of the laudanum. He lay now in a state of torpor. The rigidity of the spasms was indeed much lessened, and the general convulsions nearly gone ; but the debility was extreme ; a complete hemiplegia had supervened ; the eyes were fixed, and the speech faltering and unintelligible. Intermitting the opium, which had relieved the pain, but brought on general paralysis, small doses of camphor were given in a liquid form, and gruel with a small quantity of

wine to support the strength. For the next six days he seemed to revive ; but on the night of the first of March, he was seized, during sleep, with a convulsion as severe as ever : the jaws were more completely locked than before, deglutition was become impossible, and the pain under the ensiform cartilage was so extreme as to force from the patient the most piercing cries. At this time the effects of the quicksilver ointment were apparent in the fœtor of the breath, and in a considerable salivation.

“ All other remedies being in vain, it was now resolved to try the cold bath. Gardner was, therefore, carried to the public salt-water bath, then of the temperature of 36° Fahr., and thrown headlong into it. The good effects were instantaneous. As he rose from the first plunge, and lay struggling on the surface of the water, supported by two of his fellow-soldiers, we observed that he stretched out his left leg, which had been for some time retracted to the ham ; but his head did not immediately recover the same freedom of motion, and therefore he was plunged down and raised to the surface successively for upwards of a minute longer, the muscles of the neck relaxing more and more after every plunge. When taken out we felt some alarm ; a general tremor was the only indication of life ; the pulse and the respiration being nearly, if not entirely, suspended. Warm blankets had, however, been prepared, and a general friction was diligently employed. The respiration and the pulse became regular, the vital heat returned, the muscles continued free of constriction, and the patient fell into a quiet and profound sleep. In this he continued upwards of two hours, and when he awaked, to the astonishment of every one, he got up and walked across the room, complain-

ing of nothing but hunger and debility. The convulsive hiccup indeed returned, but in a slight degree, and gave way to the use of the cold bath ; which he continued daily a fortnight longer ; and in less than a month, we had the satisfaction of seeing our patient under arms, able for the service of his country."

The Doctor continues : " Soon after this I was sent for by a poor woman, who, in consequence of difficult labor, and, as she imagined, of local injury in some part of the uterus, was seized with locked-jaw and other symptoms of tetanus. She was immediately taken to the cold-bath, and thrown into it in the same manner of the former patient, and with similar good effects. The spasms disappeared, and though they afterwards returned to a slight degree, they gave way entirely to a second immersion."

" In the convulsions of children," says Dr. C., " I have found the cold-bath a useful remedy, whether the disorder originated in worms or other causes. I have seldom known it to fail stopping the paroxysms, at least for some time, and thereby giving an opportunity of employing the means fitted to remove the particular irritation."

Testimony of the Rev. John Wesley.

The Rev. John Wesley, well known as a shrewd observer, and an eminently good man, published a work in 1747, on water, which went through thirty-four editions, called " Primitive Physic, or an Easy and Natural Method of curing most Diseases."

After exposing and condemning the prevalent system of drugging and quackery, and the mysteries with which the

science of medicine is surrounded, and the interested conduct of medical men, Mr. Wesley gave a long list of diseases (following), for which he recommended the use of water, as the only true and safe remedy.

Mr. Wesley recommended the use of water in the following complaints of children :

Convulsions, coughs, gravel.

Inflammations of the ears, navel and mouth.

Rickets. Cataneous Inflammations.

Pimples and scabs. Suppression of urine.

Vomiting. Want of sleep.

“Water,” says Mr. Wesley, “frequently cures every nervous and every paralytic disorder ; particularly,

Asthma	Hectic fever
Agues of every sort	Hysteric pains
Atrophy	Incubus
Blindness	Inflammations
Cancer	Involuntary stools
Chin cough	Lameness
Coagulated blood of bruises	Leprosy (old)
Complicated disease	Lethargy
Consumption	Loss of speech, taste, appe- tite, smell
Convulsions	Nephritic pains
Convulsive pains	Palpitation of heart
Coughs	Pain in the back, joints, and stomach
Deafness	Rheumatism
Dropsy	Rickets
Epilepsy	Rupture
Violent fever	Suffocations
Gout (running)	

Surfeits at the beginning	Tetanus
Sciatica	Tympany
Scorbutic pains	Vertigo
Swelling in the joints	St. Vitus's Dance
Stone in the kidneys	Vigilia
Torpor of the limbs, even when the use of them is lost	Varicose ulcers The Whites.

Water prevents the growth of hereditary

Apoplexies	King's Evil
Asthma	Melancholy
Blindness	Palsies
Consumption	Rheumatism
Deafness	Stone.

Water drinking generally prevents

Apoplexies	Madness
Asthma	Palsies
Convulsions	Stone
Gout	Trembling.
Hysteric fits	

To this, children should be used from their cradles.

Mr. Wesley gives the following prescriptions :

For Asthma.

Take a pint of cold water every morning, washing the head in cold water immediately after, and using the cold bath.

Rickets in Children.

Dip them in cold water every morning.

To prevent Apoplexy.

Use the cold bath, and drink only cold water.

Ague.

Go into a cold bath just before the chill.

Cancer in the Breast.

Use the cold bath. This cured Mrs. Bates, of Leicestershire, of a cancer in the breast, a sciatica, and rheumatism, which she had nearly twenty years. N. B.—Generally, where cold bathing is necessary to cure any disease, water drinking is so, to prevent a relapse.

Hysteric Colic.

Mrs. Watts, by using the cold bath two-and-twenty times in a month, was entirely cured of a hysteric colic, fits, and convulsive motions, continual sweatings and vomitings, wandering pains in her limbs and head, and total loss of appetite.

To prevent the ill effects of Cold.

The moment a person gets into a house, with his hands and feet quite chilled, let him put them into a vessel of water, as cold as can be got, and hold them there until they begin to glow : this they will do in a minute or two. This method likewise effectually prevents chilblains.

Consumption.

Cold bathing has cured many deep consumptions.

Convulsions.

Use the cold bath.

“Mr. Wesley, in this little work, prescribes for almost every complaint; and the reader of it will be struck with the great similarity of his treatment with that which is recommended in Hydropathy; for in the majority of cases, he recommends the use of that element which we are so strongly contending for, namely, cold water.”

Singular Habits of Howard the Philanthropist.

He was a singular being in many of the common habits of life: he bathed daily in cold water; and both rising and going to bed, swathed himself in coarse towels, wet with the coldest water; in that state he remained half an hour or more, and then threw them off, freshened and invigorated, as he said, beyond measure. He never put on a great-coat in the coldest countries; nor was ever a minute under or over the time of an appointment for 26 years. He never continued at a place, or with a person, a single day beyond the period prefixed for going, in his life; and he had not, for the last 16 years of his existence, ate any fish, flesh, or fowl; nor sat down to his simple fare of tea, milk, and rusks, all that time. His journeys were continued from prison to prison, from one group of wretched beings to another, night and day; and where he could not go in a carriage, he would walk. Such a thing as an obstruction was out of the question.

Some days after his first return from an attempt to mitigate the plague at Constantinople, he favored me with a morning visit in London. The weather was so very terrific, that I had forgot his inveterate exactness, and had

yielded up the hope of expecting him. Twelve at noon was the hour, and exactly as the clock struck, he entered my room ; the wet—for it rained in torrents—dripping from every part of his dress, like water from a sheep just landed from its washing. He would not even have attended to his situation, having sat himself down with the utmost composure, and begun conversation, had I not made an offer of dry clothes. “Yes,” said he smiling, “I had my fears, as I knocked at your door, that we should go over the old business of apprehensions about a little rain water, which, though it does not run off my back as it does from that of a duck, does me as little injury, and after a long drought, is scarcely less refreshing. The coat that I have on has been as often wetted through as any duck’s in the world, and indeed gets no other cleaning. I assure you, a good soaking shower is the best brush for broadcloth. You, like the rest of my friends, throw away your pity upon my supposed hardships with just as much reason as you commiserate the common beggars, who, being familiar with storms, necessity, and nakedness, are a thousand times (so forcible is habit) less to be compassioned than the sons and daughters of ease and luxury, who, accustomed to all the enfeebling refinements of feathers by night and fires by day, are taught to shiver at a breeze. All this is the work of art, my good friend ; Nature is intrepid, hardy, and adventurous ; but it is a practice to spoil her with indulgences from the moment we come into the world. A soft dress and soft cradle begin our education in luxury, and we do not grow more manly the more we are gratified : on the contrary, our feet must be wrapt in wool or silk ; we must tread upon carpets, breathe, as it were, in fire, and fear the least change in the

weather. You smile," said Mr. Howard, after a pause, "but I am a living instance of the truths I insist on. A more puny youngster than myself was never seen. If I wet my feet, I was sure to take cold. I could not put on my shirt without its being aired. To be serious, I am convinced *that what emasculates the body debilitates the mind*, and renders both unfit for those exertions which are of such use to us as social beings. I therefore entered upon a reform of my constitution, and have succeeded in such a degree that I have neither had a cough, cold, the vapors, nor any more alarming disorder, since I surmounted the seasoning. Formerly mulled wines, spirits, and great fires were to comfort me; and to keep out the cold, as it is called : the perils of the day were to be baffled by something taken hot on going to bed ; and before I pursued my journey the next morning, *a dram* was to be swallowed, to fortify the stomach ! Believe me," said Mr. Howard, "we are too apt to *invert the remedies which we ought to prescribe to ourselves*. Thus we are forever giving *hot* things when we should administer *cold*. We bathe in hot instead of cold water, we use a dry bandage when we should use a wet one, and we increase our food and clothing when we should, by degrees, diminish both. If we would trust more to *Nature*, and suffer her to apply her own remedies to cure her own diseases, the formidable catalogue of maladies would be reduced to one half, at least, of their present number."—*Pratt's Gleanings*, 1796.

Dr. Edward Johnson's Hydropathic Laconics.

1. At all times and seasons hydropathy may be practised with the most *certain advantage* ; but Autumn, Winter, and Spring are the best seasons for carrying out the treatment most effectively.

2. It is *general disorder* which first produces *local disease*—and it is therefore the restoration of the *general health* which must constitute the first step towards the removal of *local disease*.

3. In treating chronic diseases, the effect of the hydropathic method is an exaltation of the general health and strength.

4. “Many persons of great experience practise well empirically (this is Priessnitz’s case) without much brains or reasoning ; but he who begins upon principle, and then profits by experience, must become a much more skilful practitioner.”—*Billing’s First Principles of Medicine*.

5. The cure of all diseases must be effected by the *powers of the living system*. Remedies are merely to be employed with the view of placing the body under the most favorable circumstances for resisting disease.”—*Dr. G. Gregory’s Theory and Practice of Medicine*.

6. Pregnancy is no obstacle to the hydropathic treatment ; on the contrary, by improving the health and strength, a modified employment of this treatment facilitates parturition, diminishes the severity and danger of labor, and prevents any great degree of subsequent weakness, and diseases consequent upon that weakness. Mrs. Priessnitz, a small delicate woman, invariably practises it both immediately before and immediately after confinement, and occasionally during the whole term of gestation.

7. “In how few cases of indigestion is the stomach itself first

diseased, though dyspepsia is a most convenient word, and the poor stomach is blamed for faults not its own!"—*Dr. Billing's First Principles of Medicine*. The fault consists in debility of the nervous system.

8. In some forms of disease enough of the hydropathic remedy may be carried out at the patient's own house—but in those cases which require the *full treatment*, with all its various adjuncts, it can only be carried out safely and *successfully* in the vicinity of a hydropathic establishment, where the patient is constantly under the eye of the practitioner.

9. There can be no danger in going into a cold bath while perspiring—first, because it has been practised by Priessnitz on thousands of patients, for twenty years, and no single instance of mischief has been ever observed to arise from it. Secondly, it has been the habitual custom of the Russians since time immemorial, and no danger has been observed to attend it. Thirdly, the lower classes of society are constantly exposed to be drenched to the skin, almost daily, during the rainy months, while they are covered with perspiration, arising from their several out-of-doors employment, and no evil has been observed to accrue from it; on the contrary, *they suffer less from disease* than the classes above them.

10. "The physician, carrying his knowledge into the streets and highways of life, has labored assiduously (*the lancet in one hand and quinine in the other*) to arrest decay when hurrying forward with a too fatal precipitancy."—*Dr. Gregory*.

"The lancet in one hand," says Dr. Gregory, "and quinine in the other"—these being the two great engines of relief in acute and chronic diseases—the lancet, to *lower the pulse* in acute diseases, and quinine, to *strengthen the system* in chronic. Both these effects are produced by the right application of the hydropathic treatment. The *continued* application of cold in acute diseases, as by the cold bath or wet blanket or sheet, for *several hours*, will *lessen and lower the pulse even to a thread*. While the

occasional use of the bath, accompanied by exercise, exposure to the air, simple diet, early hours, and all the other adjuncts of the treatment, will strengthen and harden the system to a degree infinitely beyond that which can be obtained by any other means whatever. Thus it supplies the place of the two grand engines of the old practice—viz : quinine and the lancet.

11. Physical man is an impressible mass of matter destined to perform certain actions (both internal and external) in obedience to the impressions made upon him by certain impressing causes. When the impressing causes are right, the impressions will be right, and the actions performed in obedience to those impressions, right also. This is health. When the impressing causes are wrong, the impressions will be wrong, and the actions resulting from those impressions, wrong also. This is disease.

To substitute right *impressing causes* for wrong ones, therefore, is to substitute *right impressions* for wrong ones, and this is to substitute right actions from wrong ones—and this is to remove the causes of disease.

When wrong impressing causes have been removed, and right ones substituted, there is within the living body a restorative or curative principle, which will remove the wrong impressions made by the wrong impressing causes. To remove wrong impressing causes, therefore, and to substitute right ones, is to cure disease. But disease can never be cured while the wrong impressing causes which produced it are suffered to continue to operate.

12. A satisfactory explanation of the essential nature or proximate cause of a *common cold* has never been given. Liebig's theory of a mutual and equal resistance between the vital force and destructive force of oxygen explains it clearly. What are the symptoms of an ordinary cold ? Defluxion from the nose—sore throat—hoarseness—cough—sneezing—and a sense of soreness over the whole surface of the body. What are the parts

affected by these symptoms? The schneiderian membrane lining the nose—the parts of the throat near the root of the tongue—the air passages leading to the lungs—and the skin. Why are these parts, in especial, first affected, when a man has taken cold, in preference to others? Because these are the parts of the body with which the oxygen of the air must necessarily come in contact before it can possibly enter the body so as to reach the internal organs. It happens thus: a continued stream of cold air, or continued exposure to wet, *while the body is inactive*—or excessive fatigue, or any other *debilitating cause*—first lowers the tone and diminishes the resistance of the vital force throughout the whole body, thus giving a preponderance to the action of oxygen over the resistance offered by the vital force. And as the oxygen must first come in contact with the skin, nostrils, throat, and air passages leading to the lungs, before it can reach the internal organs, (these being the inlets by which alone it can gain admission within the citadel,) these are, therefore, precisely the parts on which, if Liebig's theory be true, its destructive agency *ought* first to be exerted; and these *are* the parts on which it *is* first exerted—and inflammation of these parts *ought* to be the first manifestation of an undue intensity in the action of oxygen; and inflammation of these parts *is* the first manifestation of that undue intensity.

If the effect of the debilitating causes in lessening the resistance of the vital force have not been very great, then the *vis medicatrix naturæ*, or restorative principle, will restore the equilibrium between the resisting energy of the vital force and the destructive influence of oxygen, and thus remedy the mischief, in a few days. But if the vital force have been greatly depressed, then the destructive agency of oxygen will be further manifested in the more internal organs, and fever, rheumatism, or inflammation of some deep-seated organ, will be the consequence, before the restorative principle has had time to perform its task of re-

storing the equilibrium. Nothing can more clearly illustrate Liebig's theory of disease than the phenomena of a common cold.

13. Nothing can be more self-evidently true than that the artificial is only another term for unnatural, since everything which is not artificial must necessarily be natural, and everything which is not natural must necessarily be artificial. There is no mean power between art and nature. Whatever does not result from the one must result from the other. It is allowed on all hands that the life of every highly cultivated society is highly *artificial*. It is therefore *unnatural*. But can that which is *unnatural* be possibly *proper*? Can art be considered a better judge of that which is fittest for man's welfare than nature? And is not the word nature, when thus used, obviously only another term for God himself? All the contrivances of art are the result of *human ingenuity*. The contrivances of nature are the result of *divine wisdom*.

Those several contrivances which we call comforts, and with which, in our polished condition, we surround ourselves, are the inventions and adaptations of *human ingenuity*, by which we administer, in an *undue degree*, to *sensual enjoyment*. What wonder they entail upon us disease and premature death! The influence of the weather, and all those various circumstances and impressions to which man is exposed in his primitive condition, are the institutions and adaptations of divine wisdom. What wonder that we should find them necessary to our health and well-being! What wonder that we should find it impossible to get rid of our diseases while we obstinately persevere in preferring the ordinances and contrivances of art to the manifest ordinances and contrivances of God himself!

But are we not to exercise and use the ingenuity wherewith God has endowed us? Certainly—to *use*, but not to *abuse* it. But how do we know that we are abusing God's gift of ingenuity or reason when we surround ourselves with all those appliances

of pleasurable sensation which we call *comforts*, but which we *ought* to call luxurious indulgences? I answer: by the punishment of diseases and premature death, of which the evidence of our senses gives us daily proof. We know that they are wrong by the evil consequences which follow them. How do we know that intemperance is wrong? By the evil consequences which follow it. How do we know that poisons are injurious to the health? By the evil consequences which are observed to follow them. How do we know that it is wrong to indulge in the use of alcohol? By the evil consequences which follow its use. How then do we know that the domestic habits of a highly cultivated people are injurious? As in the former instances, by the evil consequences which are observed to follow them—by the multitudinous diseases and premature deaths which are everywhere observed to be inseparable from a highly-cultivated condition of society, from which diseases and from which premature deaths a *primitive* condition of society is comparatively free.* Are there no other unwholesome and unnatural stimulants to the nervous system besides those of alcohol, wine, and beer? Thousands, and tens of thousands. All kinds of artificial stimulants do not elicit those peculiar phenomena called intoxication, but all operate injuriously upon the health—they all first excite, and finally exhaust, the nervous system. They all entail upon us the RETRIBUTE PLAGUE of numberless diseases and premature death. It is the punishment which God has awarded to the presuming pride of art, or the *abuse* of human reason. God did not create man for the purpose of getting money, nor of surrounding himself with all those multiform appliances of so-called comfort which *none but the rich can purchase*; and to prove that he did not, he has determined that none *shall* purchase them without purchasing disease and decrepitude along with them.

14. Hydropathy does but assert the supremacy of God.

* One half of civilized mankind die before the age of eight years.

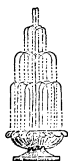
15. Hydropathy, when taken with all its adjuncts, is an *artificial primitive condition* to which the sick man *temporarily* submits himself for a temporary purpose, viz., that of giving nature, assisted by art, a fair opportunity of healing his diseases.

16. But water, when used by the hydropathic physician as a remedy for disease, is a **NATURAL INFLUENCE INTENSIFIED BY ART.**

17. Total abstinence from every species of stimulating beverage is absolutely necessary to the success of the treatment.

18. Drinking large quantities of water, without some specific object, (as, for instance, relaxing the bowels,) is productive of no intelligible good, and proves injurious by distending the stomach, and over-stimulating the kidneys.

19. Every person in England who is cured of his disease by the hydropathic treatment, owes a large debt of gratitude to Captain Claridge, whose indefatigable exertions and indomitable courage, in spite of all opposition, have succeeded in planting hydropathy in this country—a soil in which, protected by humanity, and watered and pruned by science, it cannot fail to thrive, and grow, and flourish—a blessing to the people.



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